

**Siena College**  
**A Liberal Arts Institution with a Franciscan and Catholic Tradition**

**2013-14 Catalog, Volume 72**

**Siena College Directory**

Correspondence should be addressed to the College offices indicated below and mailed to:  
SIENA COLLEGE, 515 Loudon Road  
Loudonville, New York 12211-1462

Academic Advising Support Center.....	783-2341
Academic Affairs ( <i>all student academic issues</i> ) .....	783-2307
Admissions .....	783-2423
Alumni Relations .....	783-2430
Athletics .....	783-2551
Bookstore.....	783-2346
Campus Programs and Student Activities .....	783-2330
Career Center .....	783-2339
College Chaplain's Office .....	783-2332
Counseling Services and Student Development .....	783-2342
Development and External Affairs.....	783-2432
Dining Services Office.....	783-2523
Financial Aid and Scholarships.....	783-2427
Franciscan Center for Service & Advocacy.....	783-2333
Health Services .....	783-2554
H.E.O.P.....	783-2352
Human Resources.....	783-2420
Information Technology Services .....	786-5000
International and Study Abroad Programs.....	786-5047
Library.....	782-6717
Marketing and Communications Office .....	782-8300
Office of Institutional Effectiveness.....	782-6737
Post Office ( <i>on campus</i> ) .....	783-2416
Public Safety .....	783-2376
Registrar's Office ( <i>Academic Records and Transcripts</i> ) .....	783-2310
Residence Life ( <i>Student Housing</i> ).....	783-2919
R.O.T.C. – Department Military Science -- Mohawk Battalion .....	783-2536
Saint Card Office.....	782-8282
School Offices	
School of Liberal Arts .....	783-2325
School of Business .....	783-2321
School of Science .....	783-2440
Services for Students with Disabilities .....	783-4239
Student Accounts ( <i>all financial transactions</i> ) .....	783-2317
Student Affairs .....	783-2328
Tutoring Coordinator .....	782-5769
Veteran's Services.....	783-4239
Writing Center .....	783-4125

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**Right to Modify:** All information in this publication pertains to the 2013-2014 academic year to the extent that the information was available on the catalog preparation date. The information in this catalog is not to be intended as creating a binding contract between the student and Siena College. The College reserves the right to change requirements and regulations as necessary at any time without prior notice. This includes the right to modify admission and academic requirements, to change courses, graduation requirements, tuition, fees, and any other regulations affecting the student body.

<b>ACADEMIC CALENDAR SEPT 2013-AUGUST 2014</b>			
<b>September 2013</b>		<b>March 2014</b>	
2	Labor Day	7	Mid-Semester Grades Due
3	First Day of Classes	10-14	Spring Break
9	Last Day to Add a Course	21	Last Day to Drop with a "W" Grade
9	Last Day to Change from Credit to Audit	21	Last Day to Exercise Pass/Fail Option
<b>October 2013</b>		<b>April 2014</b>	
17	Mid-Semester Grades Due	17-18, 21	Easter Holidays
18	Holiday	22	Last Day to Drop with "WP" or "WF"
<b>November 2013</b>		<b>May 2014</b>	
1	Last Day to Drop with a "W" Grade	5	Last Day of Classes
1	Last Day to Exercise Pass/Fail Option	6	Reading Day
		7-10, 12-13	Final Exams
27-29	Thanksgiving Recess	18	Commencement
25	Last Day to Drop with "WP" or "WF"	19	Summer Session 1, 3 and 4 begin
		26	Memorial Day Holiday- No Classes
<b>December 2013</b>		<b>June 2014</b>	
9	Last Day of Classes	13	Last Day to Complete 'I' grade from Spr
10	Reading Day	13	Summer Session 1 Final Exams
11-14, 16-17	Final Exams	16	Summer Session 2 Begins
		27	Summer Session 3 Final Exams
<b>January 2014</b>		<b>July 2014</b>	
20	MLK Day	4	Independence Day - No Classes
21	First Day of Classes	11	Summer Session 2 and 4 Final Exams
27	Last Day to Complete "I" Grade from Fall		
27	Last Day to Add a Course		
27	Last Day to Change from Credit to Audit		
<b>February 2014</b>		<b>August 2014</b>	

## Siena College

Siena College, founded in 1937, is a co-educational, independent, liberal arts college with a Franciscan and Catholic tradition. Situated in the attractive residential community of Loudonville, New York, Siena has an ideal location. It is easily reached from New York City, Boston, and Buffalo, and is in the center of New York State's Capital District.

The internal growth and development of Siena has been continuous. In response to the changing needs of our times, the Siena curriculum allows flexibility and individual choice for all undergraduates. Students serve with faculty on many campus committees. The College is governed by an independent, self-perpetuating Board of Trustees. An active Board of Associate Trustees serves to strengthen the relationship between the campus and the surrounding community.

Recognizing that its students come from varied racial, ethnic and cultural backgrounds, Siena College supports the creation of a multi-cultural environment for all of its students. In line with this commitment, racism--whether in word or deed--is unacceptable.

## Siena College Mission

Siena College is a learning community advancing the ideals of a liberal arts education, rooted in its identity as a Franciscan and Catholic institution.

**As a learning community**, Siena is committed to a student-centered education emphasizing dynamic faculty-student interaction. Through a blending of liberal arts and professional education, Siena College provides experiences and courses of study instilling the values and knowledge to lead a compassionate, reflective, and productive life of service and leadership.

**As a liberal arts college**, Siena fosters the rigorous intellectual development of its students through a healthy exchange of ideas both inside and outside the classroom. It provides opportunities to develop critical and creative thinking; to make reasoned and informed judgments; to appreciate cultural diversity; to deepen aesthetic sensibility and to enhance written and oral communication skills. It develops in each individual an appreciation for the richness of exploring knowledge from a variety of perspectives and disciplines.

**As a Franciscan community**, Siena strives to embody the vision and values of St. Francis of Assisi: faith in a personal and provident God, reverence for all creation, affirmation of the unique worth of each person, delight in diversity, appreciation for beauty, service with the poor and marginalized, a community where members work together in friendship and respect, and commitment to building a world that is more just, peaceable, and humane.

**As a Catholic college**, Siena seeks to advance not only the intellectual growth of its students, but their spiritual, religious and ethical formation as well. To this end, Siena is composed of and in dialogue with people from different religious and cultural traditions; fosters a critical appreciation of the Catholic intellectual heritage in conversation with contemporary experience; provides ample opportunities for worship and service; explores the moral dimensions of decision-making in business and the professions; and affirms the dignity of the individual while pursuing the common good.

## Founding of the College

Siena is a part of the tradition of higher education founded and nurtured by the Franciscan Order, the followers of St. Francis of Assisi.

At the invitation of Bishop Gibbons of Albany, the Franciscan Friars opened Siena in 1937 and placed it under the patronage of St. Bernardine of Siena, the illustrious 15th century Franciscan preacher. St. Bernardine is a fitting patron for a college as he embodies the rich and deep educational tradition that the followers of St. Francis bring to higher education. He stands also as a challenging example for the young, as a man who made the lessons of the classroom take on new life and as a lifelong student who carried his knowledge and wisdom into the busy marketplace and stately halls of government.

St. Bernardine serves then, not only as a patron, but as a model of the Arts and Sciences: above all, of the greatest art, which is the art of right-living, and the greatest science, which is the science of bringing to society the blessings of a truly liberal education.

Siena received its provisional charter from the Board of Regents of the University of the State of New York in 1938. Within four years, when the student population increased to almost 1,000, a permanent charter was granted.

### **The Franciscan Liberal Arts Tradition**

Siena College is a Catholic College with a strong liberal arts tradition, founded by followers of Francis and Clare of Assisi. The Franciscan tradition of the pursuit of knowledge is likened to a dance: between the desire of the mind for understanding and intelligibility, and the longing of the heart for love and salvation. This tradition developed nearly 800 years ago, when four professors at the University of Paris were received into the Franciscan Order. In the early years, scholarship was made a vibrant part of Franciscan life by St. Bonaventure of Bagnoreggio and Blessed John Duns Scotus in the arts, Roger Bacon in the sciences, and Luca Pacioli in business. Contemporary scholars such as Zachary Hayes, Ilia Delio, and many more have kept the dance alive. In light of this Franciscan tradition, which emphasizes intellectual, social and religious dimensions, Siena College seeks to foster scholarship, service and community.

Siena is committed to intellectual development through critical thinking skills, leading to deeper awareness of questions that challenge human beings. To this end, the College encourages students to gain proficiency in scholarly inquiry, to develop their ability to analyze, synthesize and evaluate evidence in pursuit of truth, to make sound judgments, and to refine their skills in spoken and written communication.

The Franciscan tradition endeavors to make people more sensitive to important social, political and ethical issues of today, and more aware of their responsibilities to others. This encourages them to be witnesses to a positive relation between reason and faith, and to the fact that faith must always be engaged in a critical conversation with culture.

Siena College prepares its students for demanding lives and careers in the 21st century. In a world where many perceive education solely as a means for economic advancement, Siena offers a broader and more profound vision of life, with a unique perspective. This perspective is based on the life of Jesus Christ and given unique expression by Francis of Assisi.

Therefore, Siena's students, faculty, administrators and staff will learn that the greatest power is found in humble service, particularly with the poor and marginalized. The Siena College graduate brings this experience into the world.

The Franciscan intellectual tradition indicates that each person, every creature, and all of nature give reason to praise God. Ultimately, Siena College's unique liberal arts tradition is revealed in a diverse community, where people join in pursuit of higher learning. People of all faiths and philosophies are called to foster the Franciscan tradition at Siena, with an appreciation and understanding of academic excellence and the essential role of religious faith in human life and destiny.

### **Growth of Campus Facilities**

Siena College broke ground on its signature building, Siena Hall, in 1938. The building, completed in two stages, marked the start of a constant campaign to provide students with facilities designed to complement their learning and living experience. Between 1938 and 1950, Gibbons Hall (now known as Foy Hall), St. Bernardine of Siena Friary (now known as Hines Hall), and St. Mary of the Angels Chapel were added to the campus.

In response to an increased interest in on-campus housing, Siena opened Plassmann and Ryan halls, each housing 275 students, as well as Serra Dining Hall in 1959 and 1962 respectively. In 1968 Hennepin Hall, with accommodations for 300 students, was opened. Roger Bacon Hall, Siena's first science center, was opened in 1967. The campus continued to expand in 1974 as the Alumni Recreation Center (ARC) was opened. The ARC houses Siena's indoor athletics program and major social, cultural, and academic programs. In 1992, the ARC expanded to include the Marcelle Athletic Complex (MAC). The addition

doubled the space available for student recreational use. The MAC includes a pool, aerobics/dance studio, weight room, indoor track, squash and racquetball courts, as well as a field house.

In 1981 a new, smaller Friary was constructed for the Franciscan community living at Siena. At the same time, Hines Hall was converted to a residence hall for 200 students, as well as faculty offices and classrooms.

As the college grew in size, so did the demand for on-campus housing. To provide additional living space, the college built a townhouse apartment complex to house 300 students that opened in the Fall of 1986. Additional floors were also added to Plassmann and Hennepin halls, increasing their capacities by 200 students each. Additions to Serra Dining Hall were made to accommodate the increased number of residents.

In 1989 Siena's academic facilities were enhanced with the opening of Kiernan Hall. In 1992 Colbeth Hall and the Clare Center opened, housing faculty offices and classrooms, and the St. Francis House, home to the Development and External Affairs Office, was purchased and renovated. Additional townhouses, known as Cushing Village, were also constructed in 1994 and 1995.

More recently, the College opened the J. Spencer and Patricia Standish Library in September of 1999. The 72,000 square foot building, with more than 20 miles of wire built into the walls, provides access to 100 computer stations, 500 Internet connections, a computer laboratory, and a 40-seat screening room.

In April 2001, the Sarazen Student Union was opened. The Union is home to the Pepsi Cafe, Student Communications Center, Student Senate Offices, Student Affairs Offices, and the Siena College Bookstore. Foy Hall, the previous student center, was renovated and now houses the Career Center and Creative Arts Department.

The Morrell Science Center opened in September 2001. The building is the home of our Biology, Biochemistry, and Chemistry Departments. The 55,000 square foot science center has 24 research labs, 10 teaching labs, and three support areas on three floors.

In September 2001 Siena College opened Padua Hall. Padua Hall has 96 resident rooms, each equipped with complete bathroom facilities, computer network connections, and air conditioning.

Siena College's signature building, Siena Hall, was the object of an \$8 million phased renovation which has not only upgraded infrastructure, classrooms, and offices, but also preserved the College's most prominent architectural asset. The completion of this project restores Siena Hall to its role as a major focal point of teaching and learning. A high-tech suite, the Hickey Financial Technology Center, offers the latest financial technology used every day in the world's largest financial trading centers. It includes real-world financial products from Bloomberg, Reuters, Morningstar, Compustat, Thompson One Analytics and FARS.

During the Summer of 2006, Siena completed a \$4.5 million renovation project of Serra Hall. Key features include a new entrance plaza, new entrance lobby, new services, tiered dining with privacy booths, an expanded window wall, updated mechanical and electrical systems, enhanced audio and video connected to a new campus networked TV broadcast system, and all new furnishings.

In the Summer of 2008, a new synthetic turf field located behind the Marcelle Athletic Complex was constructed. The \$2.9 million multi-use, all-weather field is used as a venue for lacrosse, field hockey and soccer, as well as numerous intramural sports. The complex features bleacher seating for 1,000, as well as a press box, scoreboard, box office and terrace area.

Also during the Summer of 2008, an aggressive renovation program of the MacClosky Townhouses was undertaken. These ongoing renovations are replacing all major systems and include a number of architectural enhancements that have been very well received by the students.

During the Summer of 2009, the Fr. Ben Kuhn House as well as a portion of the Roger Bacon Science Center were renovated. The Kuhn House is now the home for the College's Strategic Communications and

Integrated Marketing Office. In addition, a portion of the unfinished basement in the Morrell Science Center was renovated into faculty and staff office space.

In 2007 the College also purchased the New York State Police property located directly across Route 9 from the College. In 2011, the decision was made to renovate the building and utilize this space for administrative functions and the College's ROTC program. Starting in the winter of 2012, the old State Police barracks was completely renovated and thanks to a generous donation, named The Trustco Bank Center. This newly renovated space now houses a high percentage of the Finance and Administration Division staff as well as the ROTC program.

A new residence hall, which opened in the Fall of 2010, provides living space to upper-class students in double rooms that are complete with bathroom facilities in each room. This project included the construction of a second campus dining facility, a student fitness facility and a number of additional student support spaces, as well as additional conference room spaces.

In the spring of 2012 the College approved the construction of a new academic building to house several departments within the School of Liberal Arts. With the help of a generous donation by Joan and Richard Rosetti, construction of Rosetti Hall was undertaken and completed in the summer of 2013. Rosetti Hall will be our first LEED certified building and is equipped with a number of sustainability features as well as state-of-the-art classrooms.

The Siena College campus continues to be improved and to grow through construction of new buildings and renovations. The enhancements provide Siena students with comfortable and efficient learning spaces that are equipped with the latest technology and create a welcoming learning and living environment.

Siena College is also very mindful of the responsibility associated with maintaining the integrity and serviceability of our older facilities and is committed to investing in facility renewal and upgrades that protect the College's investment in its physical plant. Our goal of continuous improvement in all aspects of facilities management will continue to result in improved facilities for learning, living and working and further enhance Siena College's competitiveness and standing as a premier college campus in our region and among our higher education peers.

### **Accreditation**

Siena is registered by the Board of Regents of the University of the State of New York. All programs are accredited by the Middle States Association of Colleges and Schools. The School of Business is accredited by the Association to Advance Collegiate Schools of Business. In addition, the Chemistry program is certified by the American Chemical Society, the Social Work program is accredited by the Council on Social Work Education, and the Education programs are accredited by the National Council for the Accreditation of Teacher Education.

### **Retention Rates**

Full-time freshmen retention for the class entering in 2011 was approximately 88.7%. For full-time freshmen entering in 2010, approximately 85% were retained, and for 2009, approximately 88% were retained.

## **Admission to the College**

### **General Requirements**

Every freshman applicant to Siena College should submit a completed application to the Office of Admissions by February 15 of his or her senior year in high school. An official secondary school transcript, including work completed at all secondary schools attended by the applicant and a recommendation from the school counselor or college counselor, must be directed to the Office of Admissions. Every applicant *must* assume the responsibility for having the results of all SAT I, SAT II, or ACT examinations sent to the College. SAT II tests are not required, but the Admissions Committee reserves the right to recommend them for certain students.

### **Interviews**

While individual interviews are not required, it is *strongly recommended* that all candidates for admission to Siena visit the campus. Meeting with an Admissions counselor and a student can be helpful in evaluating the quality of the Siena experience. Arrangements can be made by calling the Office of Admissions at (518) 783-2423.

### **High School Course Requirements**

Siena College recommends that all candidates pursue a strong college preparatory program and that they elect challenging courses in their senior year. All offers of admission are made on the condition that the student earns a high school diploma or the equivalent.

Candidates seeking admission to Siena College should be well versed in mathematics and the natural sciences. For students entering the School of Science, four years of high school mathematics and four years of natural/physical sciences (including Biology, Chemistry and Physics) are necessary. Candidates seeking admission to our School of Liberal Arts or School of Business should have completed at least three years of college preparatory mathematics, reaching at least Algebra II/Trig. To be competitive for admission, we recommend candidates take a year of mathematics beyond Algebra II/Trig.

A working knowledge of a foreign language is useful for all students planning to enter the College.

### **When and How to Apply**

1. Siena College participates in the Common Application System for selective colleges and universities. Candidates may access the application by visiting [www.siena.edu](http://www.siena.edu) or by writing, calling, or emailing ([admit@siena.edu](mailto:admit@siena.edu)) the Office of Admissions, 515 Loudon Road, Siena College, Loudonville, New York 12211-1462, (518) 783-2423. The College encourages students to submit their applications during the first half of their senior year. The deadline date is February 15 of the student's senior year. Applicants who wish to be considered for a Merit Presidential Scholarship must apply by January 15 of the senior year. For special programs and transfer deadlines refer to the appropriate catalog section or the admissions page at [www.siena.edu](http://www.siena.edu).
2. Each completed application should be accompanied by a \$50 application fee and sent to the Office of Admissions. If using the Common Application, candidates must submit, by the appropriate deadline, the supplemental application. The secondary school record, recommendation form and mid-term grade report form should be given to the high school counselor or college advisor to complete the necessary information. It is the student's responsibility to be sure that all credentials necessary have been submitted.
3. The candidate must take the SAT Reasoning Test or ACT and have the results of all tests forwarded to the Office of Admissions, Siena College, 515 Loudon Road, Loudonville, New York 12211-1462. A prospective student can arrange to take one of these tests by consulting with his or her high school counselor or college advisor. Siena's CEEB code is 2814.
4. Applicants whose native language is not English are expected to submit a Test of English as a Foreign Language (TOEFL) with a recommended score of no less than 550, a computerized TOEFL score of 213, or an Internet-based TOEFL score of 79 or an IELTS score of 6.5.
5. Notification of the Admission Committee's decision will be sent to each candidate after March 15. Upon notification of acceptance, a nonrefundable deposit of \$350 will be required to reserve a place in the incoming class by May 1.

Early in the summer, after receipt of the final secondary transcript and certification of graduation, all students may expect to receive information about the reporting date and instructions for the College orientation program.

### **Early Admission**

In general, Siena does not encourage students to enter college at the end of their junior year in high school; however, the College will consider applications from outstanding juniors. *An interview with a member of the Admissions staff is required of all Early Admission candidates.*

High school seniors interested in taking college-level courses may enroll as non-degree students in courses on a space-available basis provided they possess the necessary academic qualifications. Interested seniors should call the Academic Advising Support Center at 518-783-2341 to gain more information regarding this option.

### **Early Decision**

Siena College offers applicants who have decided that Siena is their first choice an opportunity to receive an early decision. A candidate seeking this decision must submit an application by December 1, checking the Early Decision line on the application, or, if using the Common Application, on the supplemental form. The candidate will be notified of the Committee's decision by January 1 and must send a non-refundable deposit of \$350 by the date specified in the admission acceptance letter. Upon acceptance, the candidate will be expected to withdraw all other applications.

### **Early Action**

Siena's Early Action program does not restrict students from applying to other colleges. A student interested in Early Action must submit an application prior to December 1, checking the Early Action line on the application or, if using the Common Application, on the supplemental form. Candidates will be notified the first week of January.

### **Higher Education Opportunity Program (HEOP)**

Siena co-sponsors The Arthur O. Eve Higher Education Opportunity Program of New York State. As a member institution, Siena is committed to the education of students who are academically and economically disadvantaged as defined by the guidelines of the State Education Department. Applicants to this program must be New York State residents. Students who qualify for admission into the HEOP Program receive counseling and tutoring assistance, as well as financial support for their college expenses. Supportive services include a summer session prior to freshman year and continuous academic advising during the completion of the degree program. Candidates for the HEOP program must complete the application, or the Common Application and the supplemental form, by February 15.

### **International Applicants**

Siena encourages applications from international students. International students add an important dimension to our community. In addition to the materials required for general admission, international students must also submit the following documents: translated copies of secondary and college transcripts; Certificate of Financial Responsibility; and a recommended TOEFL score no lower than 550, or a computerized TOEFL score of 213, or an Internet TOEFL score of 79, or an IELTS score of 6.5.

### **Transfer Students**

Students applying for admission to Siena from two-year or other four-year institutions must submit an application for transfer admission by January 1 for the spring semester, April 1 for the summer semester, or by June 1 for the fall semester. Transfer candidates must submit the Common Application and the supplemental form or transfer institutional application. Applications for transfer admission are reviewed as soon as they are complete. Applications received after June 1 will be reviewed on a space-available basis. In addition to the application form and the application fee, the following information must be received before an admission decision can be made:

1. An official, final secondary school transcript or an official copy of a G.E.D., if applicant graduated from high school within the last 10 years.
2. Official, final, and complete transcripts from all colleges or universities attended.
3. A Transfer Recommendation Form to be completed by the appropriate college official from the last institution attended on a full-time basis. This form is only required if a student has been enrolled on a full-time basis within the past five years.
4. A \$50 Application Fee.

Although SAT or ACT examinations are not required for transfers to Siena College, students are encouraged to submit the results of SAT or ACT tests they have taken while in high school.

Transfer credit will be given only for those courses in which at least a C grade has been earned and that are similar in content, level, and scope to courses offered at Siena. Siena will accept a total of 75 credits from four-year institutions. A maximum of 66 credits may be transferred from accredited two-year institutions. These credits would include Advanced Placement, College Proficiency Examination, International Baccalaureate Diploma, and Experiential Learning credits. A tentative evaluation of credit can be made by an Admissions staff member during the candidate's interview or upon acceptance. Final approval of transfer credits is made by the dean of the School the student is entering. Transfer students entering Siena will be contacted by the Assistant to the Dean of their School for an appointment to meet and schedule courses. The evaluation of transfer credit is based on the student's academic major. Any future change of major will result in a re-evaluation of this transfer credit.

Generally, students transferring to Siena are expected to have a minimum 2.5 cumulative average at the institution where they are currently enrolled. Admissions standards will vary depending upon the space availability in specific programs.

Students who transfer into Siena with 24 or more credits do not take First Year Seminar sequence 100 and 101 but will fulfill this requirement by using any two other core courses (3 credits each from any two areas). Students who transfer in the spring semester with fewer than 24 credits will take First Year Seminar 101 in the Spring semester, but will not take First Year Seminar 100 the following fall. Instead, they will substitute any other core course.

Students may transfer a maximum of 75 credits. A maximum of 66 credits can be transferred from accredited two-year institutions.

Transfer students must earn a minimum of 45 semester hours and complete at least half of the major field to earn a degree at Siena. All departmental and general core curriculum requirements must be completed.

Students in the School of Business must earn at least half of *all* Business credits counted toward the degree at Siena. The only exception to this rule is for students from schools with which we have a dual degree agreement, e.g. CEFAM.

Credit from another accredited institution will transfer with a grade of C when the course is similar in content and scope to courses offered at Siena. When a course is accepted in transfer, only credits transfer – quality points (i.e. grades) do not.

Once students matriculate at Siena, they are permitted to transfer in up to 18 additional credits. Any exceptions must be pre-approved by the School Dean. This limit of transfer credits does not apply to credits earned from Study Abroad programs. The maximum total of transfer credits is 75.

#### **Re-Entry Students**

Students who interrupt their studies for financial or personal reasons need only contact their School Office to reactivate their records, register, and be assigned an advisor. Students dismissed for poor scholarship must seek permission from the VPAA to apply for readmission.

#### **Non-matriculated Students**

An individual may take a limited number of courses on a credit-no-degree basis as a part-time student. If the student later matriculates the appropriate credit earned will be applied toward graduation requirements.

No more than 15 credits may be taken on the credit-no-degree basis unless approval is secured from the Office of the Vice President for Academic Affairs.

#### **Auditing Students**

A student may audit a course with the approval of the academic advisor. The deadline date for declaring audit status is indicated in the Academic Calendar. The auditing fee is the usual tuition for the course and laboratory charges. A grade of AU is recorded if attendance standards are met. If attendance

standards are not met, the grade of W is assigned. No academic credit is granted. An audited course may be taken for academic credit in the future, but all course requirements must be met at that time. An audited course does not count toward the 12 credit hours which must be maintained per semester in order to remain eligible for most forms of financial aid.

### **International Students**

Siena College is enrolled in the Student and Exchange Visitor Information System (SEVIS) and is permitted by the United States Citizenship and Immigration Services to admit non-immigrant students (F-1 status). Upon confirmation of acceptance, the Office of International Programs issues an I-20 form, allowing the prospective student to apply for the student visa. While at Siena, the F-1 student must pursue a full course of studies (12 or more semester hours) except during the summer term. Students may be employed on campus. International students are expected to maintain regular contact with the Office of International Programs, and must inform the Office of all changes in status, address or employment.

### **Advanced Placement**

Students who have successfully passed one or more Advanced Placement Tests administered by the College Entrance Examination Board may request advanced placement and/or credit. Advanced placement means that the student may be scheduled for a course at a more advanced level. Credit means that the student receives credit toward the 120 hours required for graduation. A score of 4 or 5 will usually be accepted for placement or credit. No grades are assigned to the courses for which the student receives advanced placement credit. A student with a distinguished high school record and superior scores on standardized entrance examinations also may be considered for advanced placement without credit.

### **International Baccalaureate**

International Baccalaureate Higher Level examinations will be received for credits for scores of 5 or better. No credit is awarded for Standard Level examinations. Courses are recommended to the appropriate school dean for acceptance as transfer credit, on a course-by-course basis, to a maximum of 30 credits.

## **Tuition and Fees**

Students enrolled for 12 or more hours are considered to be full-time students. College policies and charges for tuition and fees are listed below:

*Tuition:* Tuition for 12 to 16 credit hours

Undergraduate per semester(Returning Students).....	14,891.50-15,559.00
Master of Science in Accounting per semester .....	15,225.50
Tuition per credit hour for 1 to 11 credit hours or for each hour in excess of 16 credit hours	
Undergraduate .....	500.00
Masters of Science in Accounting .....	1,015.00

*Residence:*Room (per semester)

Hennepin Hall (per semester) .....	3,682.50
Hines Hall (per semester) .....	3,682.50
Plassmann (per semester).....	3,682.50
Ryan (per semester).....	3,682.50
Padua (per semester) .....	4,222.50
MacClosky Square (per semester) .....	4,425.00 - 4,735.00
Cushing Village (per semester).....	4,425.00
New Dorm (per semester).....	4,695.00 - 6,772.50
Standard Board (per semester) .....	2,257.50

*Tuition Deposit:*

New Students-Full-time .....	350.00
New Students-Part-time .....	50.00

*Course and Laboratory Fees:*

Biology, Chemistry, Computer Science, Environmental Science, Mathematics, and Physics Labs (per lab hour).....	80.00
(ENVA—100).....	80.00
(ENVA—430).....	105.00
(SCDV—01 0).....	130.00
(SCDV—21 0, 211,230).....	80.00
Calculus (MATH—110, 120).....	105.00
Calculus (MATH—210).....	130.00
Computer Use Fee (determined by course) .....	105.00
Creative Arts (CREA—1 11, 112, 200, 204, 221, 280, 312, 313, 314,325, 360, 420,430, 435,460) .....	80.00
Creative Arts (CREA—1 04, 135, 219, 251, 252, 258, 330, 349, 450, 451, 452, 453, 454).....	105.00
Creative Arts (CREA—145, 345, 347, 348).....	130.00
Education (EDUC—495, 496).....	80.00
First Year Seminar (per semester).....	80.00
Political Research course.....	80.00
Psychology (PSYC—300,400).....	105.00
School of Business Technology (All Sch. of Bus. Majors) (per semester).....	80.00
Sociology (SOC—202).....	80.00

*Miscellaneous Fees:*

Application Fee.....	50.00
College Registration Fee (Part-Time Students, per sem.)...60.00	
Commencement Fee.....	125.00
Late Payment Penalty (per semester).....	35.00
Late Fee (per semester).....	60.00
Orientation Fee, Full-time Freshman.....	220.00
Academic Support Service Fee, Full-time Freshman.....	105.00
Parking Permit (per year) Plus Tax.....	75.00
Resident Student Laundry Fee (per semester).....	45.00
Returned Check Fee.....	50.00
Student Activity Fee (Full-time students, per semester)..	125.00
Student Health Insurance (per semester).....	689.00
Transcript Fee (one-time).....	25.00

**Procedure for Payment**

All charges and fees for each semester must be paid in full at the start of each semester. Checks should be made payable to the order of *Siena College*.

No provision is made for installment payment directly with the College. Individuals who wish to make such arrangements should do so through TuitionPay Plan from Sallie Mae, PO Box 813, Swansea, MA 02777, (800) 635-0120, [www.tuitionpayenroll.com](http://www.tuitionpayenroll.com), or Tuition Management Systems, PO Box 842722, Boston, MA 02284-2722, (888) 572-8985, [www.afford.com/siena](http://www.afford.com/siena), or with any other commercial firm that handles such financing.

A student may not receive a diploma or transcript until all accounts have been paid in full.

**Payment by Check**

Any checks payable to the college returned due to “insufficient funds” will be assessed a fee. In addition to this fee, the college may require that all future payments be made by certified funds.

### **Deposits**

A TUITION DEPOSIT of \$350 is required of all new full-time students and \$50 of all new part-time students upon acceptance. This deposit must be made to effect completion of acceptance at the College and is non-refundable.

### **Rooms and Meals**

Students living on campus are required to subscribe to a Siena meal plan. The cost for room and full meal plan is \$11,880-\$18,775 for the 2013-2014 academic year. There are a variety of meal plans available. Changes to a meal plan may be made only within the first two weeks of each semester and may be made with the Director of the Food Service in Serra Hall or the Director of Residential Life in the Sarazen Student Union.

### **Books and Supplies**

All required books and supplies and many other items commonly used by students are available at the Campus Bookstore located in the Sarazen Student Union. It is estimated that books and supplies will cost approximately \$1,282 per year.

### **General Estimate of Cost**

The cost for a commuting student can be estimated at \$36,640 or \$37,975 for 2013-2014. Resident student costs can be estimated at \$48,388 or \$49,723. Actual costs may vary, depending upon academic program and choice of residence. The above figures do include non-billed costs which the student may incur: Books, supplies, personal and transportation expenses.

### **Withdrawals and Refunds**

A student who finds it necessary to withdraw from any courses before the conclusion of the Fall or Spring semester or summer sessions must first obtain a withdrawal form available in the Office of the Registrar. After students have obtained the withdrawal form, they must consult with the appropriate School Dean. The withdrawal form must be signed by the Dean and returned to the Office of the Registrar. A resident student must also advise his or her residence hall director. The date of withdrawal will be the later of the student's documented last date of attendance at an academically-related activity or the date indicated by the student as their intended withdrawal date when the student submits a written statement of withdrawal. If a student leaves the College at any time during the semester without following this procedure, he or she will be marked as having failed in all courses for the semester. No refund will be given after the fifth week of the semester for fall and spring. No refund will be given for Summer Sessions after the fourth class has met. Any credit balances will be refunded by the method paid. A request for refund must be made in writing to Student Accounts in order for a refund to be issued.

*Tuition:* Tuition will be refunded on a proportionate basis according to the following schedule:

Fall and Spring Semesters

Two weeks or less	80%	Five weeks	20%
Three weeks	60%	Over five weeks	No refund
Four weeks	40%		

Students who receive financial aid and terminate their studies before the end of a semester may be required to refund a portion of their financial aid. The formula to be used is described in the Financial Aid section of this catalog. This refund policy is not applicable to students dismissed from the College and/or College housing for disciplinary reasons. If the College must return federal aid to the government on behalf of a student dismissed or denied access to housing and food services within the first four weeks of a semester because of disciplinary sanctions, the College will charge the student the amount the College was required to refund the government on his/her behalf. This refund policy does not apply to emergency closings; see Academic Information and Regulations.

### Room and Board Fees:

All full time students, with the exception of commuters and transfer students, are required to live in college residence facilities to the extent space is available and to purchase a board contract.

If you wish to appeal the residency requirement at any time you must:

1. Submit a written appeal to the Contract Appeals Board c/o the Director of Residence Life. The appeal should be a request to be contractually released from the Housing/Food Service requirement for the subsequent semester or academic year. Examples may include but are not limited to: particular medical health needs, changes in your personal or financial circumstances or to review a first year freshman's request to change to commuter status as defined by the student handbook, *Siena Life*.
2. You and your family are strongly encouraged to include written documentation in support of the reason(s) (e.g. medical information, financial information, etc.) with your request for appeal.
3. In the event that you are granted a release from the residency requirement or contract, you are no longer subject to the residency requirement as determined by the Appeals Board.
4. The decision of the Appeals Board is final.
5. Students who withdraw from the College will receive a pro-rated refund dependent upon the ability to fill all beds.
6. Students with billable damage (room/suite/townhouse and common area damage or vandalism) in excess of \$100.00 may have this Housing/Food Service Contract immediately cancelled.
7. Students dismissed from housing for disciplinary reasons are not eligible for any refund of housing fees (room and board, if applicable).

Other fees: Other fees will not be refunded in whole or in part.

## Academic Information and Regulations

Siena College is approved by the New York State Education Department to offer the Master of Science in Accounting, Bachelor of Arts, the Bachelor of Science, the Bachelor of Business Administration, and programs leading to professional licensure, certification, teacher certification (grades 7-12) and 5, 6 extension and business and marketing education (all grades). Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards (NYSED Commissioner's Regulations (53.3(d)(1)).

<u>CIP</u> <u>CODE</u>	<u>PROGRAM</u>	<u>HEGIS</u> <u>CODE</u>	
520301	Accounting	0502	Bachelor of Business Administration
		0502	Bachelor of Science
		0502	Master of Science
		Prov	Initial Teacher Certification
		5002	Certificate
279999	Actuarial Science	1799	Bachelor of Science
050102	American Studies	0313	Bachelor of Arts
	Social Studies	Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
260202	Biochemistry	0414	Bachelor of Science
260101	Biology	0401	Bachelor of Science
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
269999	Biology/Medical Albany Medical Joint Program	0499	Bachelor of Arts
400501	Chemistry	1905	Bachelor of Science (Also certified by American Chemical Society)
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
161200	Classics	1504	Bachelor of Arts

440201	Community Devel.	Prov.	Certificate
279999	Computational Science	1799	Bachelor of Science
110101	Computer Science	0701	Bachelor of Science
		5101	Certificate
500101	Creative Arts	1001	Bachelor of Arts
450601	Economics	2204	Bachelor of Science
		2204	Bachelor of Arts
		Prov	Initial Teacher Certification
230101	English	1501	Bachelor of Arts
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
261301	Environmental Studies	0420	Bachelor of Arts
		0420.	Bachelor of Science
520801	Finance	0504	Bachelor of Science
		Prov	Initial Teacher Certification
160901	French	1102	Bachelor of Arts
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
540101	History	2205	Bachelor of Arts
	Social Studies	Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
110101	Information Systems	5101	Certificate
309999	International Studies, Foreign Language, Business	5699	Certificate
521401	Marketing	0509	Bachelor of Science
		Prov	Initial Teacher Certification
520201	Management	0506	Bachelor of Science
		Prov	Initial Teacher Certification
270101	Mathematics	1701	Bachelor of Arts
		1701	Bachelor of Science
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
300501	Peace Studies	5622	Certificate
380101	Philosophy	1509	Bachelor of Arts
400801	Physics	1902	Bachelor of Science
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
451001	Political Science	2207	Bachelor of Arts
			(grades 7-12) and 5, 6 Extension
	Pre-Law Studies		Certificate
420101	Psychology	2001	Bachelor of Arts
380201	Religious Studies	1510	Bachelor of Arts
059999	Revolutionary Era Studies	5603	Certificate
279999	Risk Management	0504	Certificate
131205	Secondary Education Biology, Chemistry, Physics, French, Spanish, English, Mathematics, Social Studies (American Studies, History, Political Science, Sociology)	Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
	Business and Marketing	Prov	Initial Teacher Certification (all grades)

440701	Social Work	2104	Bachelor of Arts
451101	Sociology	2208	Bachelor of Arts
	Social Studies	Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
160905	Spanish	1105	Bachelor of Arts
		Prov	Initial Teacher Certification (grades 7-12) and 5, 6 Extension
500501	Theatre	5610	Certificate

### **Emergency College Closing**

In the case of an emergency, such as a pandemic flu outbreak, natural disaster or like circumstance beyond the College's control, where the College is forced to close, the College reserves the right to continue delivery of services through alternative means, including, but not limited to, remote instruction or changes in the weeks of a normal semester, in order to meet academic requirements. The College also reserves the right to invoke a different refund policy that will take into consideration the College's efforts to continue the delivery of academic services.

### **Undergraduate Degree Requirements**

To qualify for the Bachelor's degree, a student must be in good standing, both in conduct and academics; must satisfactorily complete 120 hours of coursework as specified by the department and school, attain a minimum cumulative index of 2.00, and earn at least a C- grade in every major field course used to satisfy the credit hour requirement of the major. At least half of the major field and a minimum of 45 credit hours must be earned at Siena. For majors in the School of Business, at least half of all business credits counted toward degree fulfillment must be taken at Siena.

All students should choose courses so that they fulfill the minimum number of credits in the liberal arts required for their degree: 90 credits of liberal arts and science (courses with the attribute ARTS) for the B.A. degree, and 60 credits for the B.S. degree.

Full-time students are required to spend the senior year as full-time matriculated students. Only in exceptional cases will a waiver of this policy be granted. Application for a waiver should be made in the School Office; final approval must be granted by the Vice President for Academic Affairs.

Students must meet all of the program requirements as listed in the catalog under which they first matriculated or any subsequent catalog of their choice. Matriculated students who remain unregistered for eight or more consecutive semesters must meet all of the program requirements as listed in the catalog in place when they re-enter or any subsequent catalog of their choice.

It is the responsibility of the individual student to fulfill requirements for the degree. Through his or her own initiative, progress towards graduation should be reviewed with the Academic Advisor. The Registrar's Office will determine if all requirements are met for graduation purposes.

### **Core, Concentration, and Electives**

The 120 credits required for graduation are to be earned through core, concentration, and elective groupings. The student must follow the specific requirements of the major field, which are described in this catalog under each department.

#### **Core Curriculum**

The College Core comprises 42 credits and 14 courses. It is divided into three areas:

**The First-Year Seminar ( 2 Courses)**

**Disciplinary Core ( 8 courses)**

**Franciscan Concern Core ( 4 courses)**

**First-Year Seminar (CFY)**

The First Year Seminar is a two-semester sequence taught by the same faculty member to the same small group of students each semester of Freshman Year. There are four themes for the year-long sequence: Heritage (Fall), Natural World (Fall), Diversity (Spring), and Social Justice (Spring).

Within each section offered, there are some common interdisciplinary readings plus an introduction to the stories of St. Francis and St. Clare. The values of Francis and Clare are interwoven throughout the year. Each faculty member teaching the course chooses the remaining readings and brings coherence to the section under a theme and title- for example, Food, Native Americans, Women, The Environment, Truth, or The Common Good.

The sequence prepares Freshmen for the intellectual life of college: how to read critically, how to engage with a text, how to articulate an informed position on big questions, how to write clearly and persuasively, how to voice an opinion in a classroom conversation, how to make connections between and among the readings they are doing, the subjects they are studying, as well as between Siena and the outside world.

### **Core: Disciplinary Courses**

The disciplinary component of the Core ensures intellectual breadth and exposure to a variety of modes of inquiry that characterize liberal arts education.

English (CDE)

History (CDH)

Philosophy (CDP)

Religious Studies (CDR)

Creative Arts (CDA)

Quantitative Analysis (CDQ) Courses in Computer Science, Math and Quantitative Business Analysis

Natural Science (CDN) Courses in Biology, Chemistry, Environmental Studies, and Physics

Social Science (CDS) Courses in Psychology, Sociology, Social Work, Economics, Political Science and Education

### **Core: Franciscan Concern**

The Franciscan Concern component of the Core ensures thematic exposure to themes of special importance to the Franciscan Tradition that can be explored from multiple perspectives. There are four Franciscan Concern areas:

#### **Heritage: Traditions and Their Texts (CFH)**

As a tradition born in the 13th Century, the Franciscan Tradition is embedded within Western heritage, and as a living tradition nearly 800 years old, the Franciscan Tradition is constitutive of subsequent Western heritage. The "Heritage" rubric embraces this broad sense of tradition. Courses are welcome that acquaint students with one or more of the major intellectual, cultural, or religious traditions in this history and the texts, figures, events, or movements associated with them. Courses in this category elucidate how these traditions address fundamental questions of humanistic or religious concern.

#### **Diversity: American & Global Pluralism (CFD)**

The Franciscan concern for diversity flows from its affirmation of each individual as worthy of respect and compassion. Individuality implies plurality of perspective, both on the level of differences among persons and on the level of differences among peoples. Appreciating diversity requires that students have the opportunity to see things from perspectives they do not normally occupy. This includes the examination of diverse intellectual perspectives.

#### **Social Justice: Principles and Practice (CFJ)**

The Franciscan Tradition joins with other traditions and movements in placing a premium on social justice. Social justice permeates all levels of human affairs and admits investigation from a variety of perspectives. Broadly speaking, social justice concerns (a) the practical organization of human affairs allowing for maximal human flourishing, (b) the values and principles guiding or that might guide the organization of human affairs, (c) the extent to which such values or principles are practically realized or under-realized. The "Social Justice" theme welcomes courses that study the theory or practice of justice from social, moral, political, religious, economic, environmental, aesthetic, or technological points of view.

### **Nature: Scientific & Normative Approaches to the Natural World (CFN)**

The Franciscan Tradition affirms the goodness of nature. As an intellectual tradition, it supports the scientific investigation of nature, and as a spiritual tradition it cultivates deepened appreciation for the entirety of the created world and heightened commitment to the effective stewardship of the Earth and all living things. The "Natural World" theme welcomes courses which both investigate the natural world from a scientific perspective and also examine the impact and consequences of human involvement in natural systems.

### **Core Guidelines**

Students may use a maximum of *one* major course to satisfy the Disciplinary Core requirement.

Students may use *one* additional major course to satisfy a Franciscan Concern Core requirement. Students can take additional courses in their major that are designated as "Core" to fulfill their major requirements - these will *not* count as Core.

All departments, *except* Religious Studies and Social Work, allow their majors to count one major course as a Franciscan Concern course.

Franciscan Concern courses must be taken at Siena with the following exceptions:

- 1- Students transferring to Siena may transfer in Franciscan Concern courses.
- 2- Study Abroad students will be allowed to transfer in up to two Franciscan Concern courses from their Study Abroad courses.

*No more than one* course from a subject (i.e. History, English etc.) can be taken to meet the Franciscan Concern requirements.

### **Core Curriculum (For students matriculating prior to the Fall 2011 Semester)**

The Core Curriculum, consisting of 42 credits, 14 courses, provides every Siena student with a common, coherent educational experience. Through the core, students pursue courses in the traditional liberal arts and sciences. They enter into dialogue with traditional and contemporary figures who have confronted fundamental questions about the universe and the place of human beings in it. Core courses engage students in critical thinking, stress effective communication, and introduce students to the perspectives and modes of knowing specific to the arts and sciences.

Every course that meets Core Curriculum requirements has a coded notation (attribute) at the end of each course description listed in the departmental sections of the catalog.

The Core requirements are:

Foundations Sequence (CFS) (2 courses, 6 credits to be taken by all First Year Students and Transfer Students with fewer than 24 credits) FOUN—100 and FOUN—105.

Disciplinary Requirements (4 courses, 12 credits): English (CDE) , History (CDH), Philosophy (CDP) and Religious Studies (CDR).

Area Requirements: Area requirements must be taken in departments outside of the student's major field of study. No more than two Area courses may be taken from any one department. Area courses introduce students to the ways in which disciplines construct knowledge.

Aesthetic Dimensions: (CAA) (1 course, 3 credits)

Social Science Perspectives: (CAS) (2 courses, 6 credits)

Natural World (CAN) and Quantitative Reasoning: (CAQ) (3 courses, 9 credits) At least one of these courses (3 credits) must be taken from the natural sciences, and at least one course (3 credits) must be

taken in quantitative reasoning. The third course is selected by students in consultation with their academic advisors.

In addition, students must successfully complete 6 hours of course work (3 hours in each of two Areas) from the following Areas:

Literature: (CAL)  
Human Past: (CAH)  
Philosophical Questions: (CAP)  
Religious Dimensions: (CAR)

### **Major**

No later than the end of the sophomore year, each student must select a major field.  
The following rules govern major:

1. The student, in consultation with his or her department advisor, selects courses in the major field. Except for certain programs in Teacher-Education, the requirements, depending upon the department, range from 30 to 39 hours in the major area. Students must complete at least half of the major field at Siena.
2. Auxiliary courses in subjects related to the major may be required.
3. Credits earned under the disciplinary requirement may be used in fulfillment of the requirements in the major field.
4. No more than 48 credit hours in any one subject field may be applied toward the degree requirement of 120 hours.
5. A student must earn a minimum grade of C- in each required course in the major field as well as in all other elective major courses that are used to satisfy the 30 to 39 hours requirement of the major; and must have a minimum average of 2.0 in the major.

### **Changing Schools**

Depending on the academic interest expressed in their application, students are admitted to Siena College as members of the School of Liberal Arts, School of Business or School of Science. Students wishing to declare a major in a new School may not do so during their first two semesters, although they may take any course in the College for which they have the prerequisites. After completing two full-time semesters students may transfer to a new School if:

1. They have a cumulative GPA of 2.0 or higher.

**OR**

2. If students have a cumulative GPA of less than 2.0 they must earn a C- or higher in any of the following courses in the new School:
  - School of Liberal Arts: 1 Core disciplinary course AND 1 Intro to Social Science course OR 2 Core disciplinary courses.
  - School of Business: Any TWO from: QBUS—100, QBUS—110, ECON—101, ECON—102.
  - School of Science: Introductory course for majors in ANY TWO School of Science departments.

Students with an interest in changing schools will see the Assistant Dean in their current School who will then forward their academic record to the Assistant Dean in the other School. When these students are officially accepted in their new School, they will be assigned a new faculty advisor.

### **Change of Major**

A student may change a major within the same School with the permission of the school dean and by completing a student permanent record change form available in the School office. To change to a major in a different School, see the “Changing Schools” section above. Students who change or declare their major must meet all of the program requirements as listed in the catalog under which they first matriculated or any subsequent catalog of their choice.

### **Minor**

Minors are optional for all students; no student is required to declare a minor. Students who want a minor designated on the transcript must declare the minor before the end of their junior year. It is the

responsibility of the student to declare a minor within a timeframe which will allow enough time to complete the minor requirements before the student's graduation. The form used to declare a minor is available in the School offices. Students with a declared minor who decide not to complete the minor must notify their School's office to "undeclare" the minor.

The following rules govern minors:

1. At least 18 credits (or 6 courses) are required, as outlined by the departments offering the minor.
2. Students are required to maintain a 2.0 average in the courses counted toward the minor; no grade below a C- will be included.
3. No course in a student's minor may be taken pass/fail.
4. Students may not use the same course in their major department to fulfill both major and minor requirements.
5. One-half of the courses in the minor must be taken at Siena College.
6. Courses taken to satisfy the minor may also be used to fulfill the core.

Requirements for minors are provided in each department's or program's section of the catalog or in the "Multidisciplinary Courses and Minors" section of the catalog.

### **Double Majors**

A student may graduate with a major in two disciplines upon completion of the requirements for both. This choice helps focus the plan of study but reduces the options for course selection each semester. Students must officially register as a major with the primary department and file a form for recognizing the second major with the Registrar. Double majors must be completed by the time the four year degree requirements have been met. If all requirements for the second major are successfully completed, both majors will be recorded on the student's official transcript upon graduation. The primary major will be recognized as the field of concentration for Commencement purposes.

Occasionally two separate majors may have some overlap of course requirements. A course may be used to satisfy requirements in both majors. A student will not be considered to have completed a second major unless at least seven of the courses successfully completed in fulfillment of the second major are different courses from those taken to fulfill the primary major. If the primary major requires auxiliary courses (which must be taken but which are not actually considered part of the major), they may be counted toward the second major. The minimum grade point average required for completion of the primary major also applies to a second major. Any questions regarding a student's eligibility for a second major will be resolved by the School Dean, if both majors are in the same School, or by the Vice President for Academic Affairs, if the majors are in different Schools.

### **Double Degrees**

#### **Simultaneous Awarding of Degrees**

A second Bachelor's degree may be earned by completing at least thirty (30) additional credit hours in matriculation and fulfilling all of the requirements for the second degree, the major for which shall not be from the same School as that for the first degree. This provision can be made only when the degrees are in two essentially different areas of study.

#### **Second Degree**

An alumnus and/or graduate of another four year college or university may be considered for a second degree from Siena College by meeting the following requirements: 1) completing at least 30 additional credit hours at Siena in matriculation, 2) fulfilling all of the College's core curriculum, and 3) the degrees are in two essentially different areas of study and the majors are not from the same School. In addition to these three conditions, the non-Siena graduate must meet the requirements stated in this catalog relating to transfer students. All students wishing to pursue either simultaneous or second degrees must consult with an Associate Vice President for Academic Affairs.

#### **Transfer Credit for Matriculated Siena Students**

Prior to registering for a course at another institution, students must provide their School Dean with a description of the desired course, and complete a transfer credit permission form. Courses consistent with the mission of the college may be approved through the Office of the School Dean.

Any course that is equivalent to a course at Siena that is “300 or above” must be taken at a four-year institution. Exceptions may be made only for those schools with which Siena has an articulation agreement. See your School office for information regarding specific courses as each School at Siena has its own internal rules governing the transfer of credits.

Transfer credit will be given only for those courses in which at least a C grade has been earned and that are similar in content and scope to courses offered at Siena. When a course is transferred to Siena, the credits are transferred, but the grades are not. Beginning in Fall 2013, once students matriculate at Siena, they are permitted to transfer in up to 18 additional credits. Any exceptions must be pre-approved by the School Dean. This limit of transfer credits does not apply to credits earned from Study Abroad programs. The maximum total of transfer credits is 75.

### **Hudson-Mohawk Association - Cross Registration**

Full-time matriculated students enjoy the opportunity to enrich their education by cross-registering for courses at the following area institutions: Albany College of Pharmacy, Albany Law School, Albany Medical College, The College of Saint Rose, Empire State College, Hartwick College, Hudson Valley Community College, Junior College of Albany, Maria College, Massachusetts College of Liberal Arts, Regents College, Rensselaer Polytechnic Institute, Russell Sage College, Schenectady County Community College, Siena College, Skidmore College, State University of New York at Albany, and Union College. Qualified Siena students are eligible to register for courses offered at these other institutions, provided they have the approval of their faculty advisor and Dean. Students taking advantage of the cross-registration privileges are subject to the regulations and policies of the host institution. Grades and credits earned at the other institution will become part of the student’s permanent record at Siena College and are included in the calculation of the term and cumulative indices. Summer Sessions are excluded from the cross-registration agreement. Contact the Registrar for further information.

### **Academic Advising**

Every student at Siena is assigned a Faculty Advisor. The advisor teaches in the School (in the case of students who have not declared majors) or in the discipline in which the student is majoring. The purpose of academic advising is to empower students to choose a direction for their course of studies, help them make intelligent choices for courses within the confines of degree requirements, guide students through the course registration process, and to help students when they are having academic problems. While students are ultimately responsible for confirming that they meet all graduation requirements, they are encouraged to keep in regular contact with their academic advisors, and are required to consult with them before registration.

In addition to meeting with an individual faculty advisor, students may also contact the Academic Advising Support Center with advising concerns or questions about college procedures. The Academic Advising Support Center will assist with drop-in questions or when faculty advisors are unavailable. The Center is a supportive resource for both faculty and students and is designed to facilitate high quality academic advising for all Siena students. Additional information about advising is available on the College’s web site (<http://www.siena.edu/advising>).

### **Registration**

All students are expected to register during the registration period. The details and dates of the registration procedures may be found in the schedule of classes published before each semester by the Office of the Registrar. Information is also listed on the Registrar’s web page. Each student’s registration is not complete until the student has satisfied all financial obligations with Student Accounts and has met all Health Service requirements. Students need permission from their School Dean and the Office of the Vice President for Academic Affairs to take more than 19 credits in a given semester. This applies to courses taken at Siena and those taken concurrently at other colleges. Only in exceptional cases will permission be granted.

### **Regular and Summer Sessions**

The Fall Semester begins in September and ends in December, and the Spring Semester begins in January and ends in May. Multiple Summer terms are available beginning in May and ending in July. Course

offerings are published and are available on the college website before each academic session. In any of these sessions, a course for which there is an insufficient enrollment may be cancelled.

### **Unit of Instruction**

A credit represents 55 minutes of lecture or a minimum of two hours of laboratory work (120 minutes) per week for one semester, or the equivalent, unless otherwise noted. Laboratory work, where required, is considered an essential part of the course and must be pursued in conjunction with the lectures to obtain credit.

Siena College follows the U.S. Department of Education definition of a credit hour. Specifically, the College defines a credit hour as:

“An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

- 1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work for approximately fifteen weeks for one semester credit or
- 2) At least an equivalent amount of work as required in (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.”

### **Independent Study**

Independent Study courses allow students to work on topics of their choosing under the supervision of a faculty member. The courses are listed under each department and require a proposal approved by the faculty member, the Department Chair, and the Dean.

### **Tutorials**

Tutorials may be given only in courses listed in the catalog other than Independent Study. Tutorials are to be requested only in rare instances; e.g., if a course is required, but will not be offered before graduation. Therefore tutorials are aimed at seniors seeking to complete requirements for a major, minor or certificate. Tutorials require the same number of contact hours as regular courses, and the permission of the faculty member, the Chair, the Dean, and the Vice President for Academic Affairs.

### **Absences from Class**

A student is expected to attend every class and laboratory for which he or she has registered. Each instructor will make known to the student his or her policy with respect to absences in the course. It is the student's responsibility to be aware of this policy. A student may present to the instructor a written statement from an authorized school official if an excused absence is requested for a college-related activity, e.g., an athletic meet, class trip, etc. The instructor makes the final decision to excuse or not to excuse an absence. An instructor is entitled to give a failing grade (U) for excessive absences.

If there has been an extraordinary reason for excessive absences, such as prolonged illness, a student may petition the Vice President for Academic Affairs in writing to consider reinstatement in the class or permission to withdraw with the grade W.

It is the personal responsibility of the student to make up all work assigned during an absence from any class or laboratory.

### **Change of Address**

Students should report at once to the Office of the Registrar all changes of campus or home residence address.

### **Pass/Fail Option**

The pass/fail option is designed to encourage students to take courses outside of their major fields without affecting the grade point average.

Any full-time matriculated student may elect to take one pass/fail course each semester (excluding Summer Session) to a maximum of eight courses towards graduation. Unless students have already satisfied with a graded course(s) all the requirements - as listed in the degree audit area of their CAPP report - they may not take any of the following courses pass/fail: courses in their major, minor or auxiliary courses for the major; courses in the college core or the common business requirements or the business core. For instance, a student may take a CDS course pass/fail only if he or she has already received a passing grade in two previous CDS courses. Certain Certificate Programs do not allow students to take required courses under this option. Students should check with the Director of the Certificate Program. Courses offered only on a pass/fail basis do not count as part of the eight course pass/fail limit. See School offices for lists of courses mandated as pass/fail.

Matriculated part-time students also may take advantage of this option. The student must be registered for at least six credits in the semester in which the Pass/Fail Option is chosen (excluding Summer Session) and may not use the option in two consecutive semesters.

In order to receive a passing grade P, the student must earn at least a D- grade in the course. Otherwise, the failing grade Z will be assigned, and no credit will be received. A Pass/Fail grade does not affect a student's quality point index. The original letter grade will not be revealed to the student, listed on a transcript, or transmitted to another college.

The student must complete the appropriate form in the Office of the Registrar by the published deadline and may not make a change after the deadline.

#### **Adding a Course**

Students may add courses until the deadline published in the Academic Calendar.

#### **Dropping a Course**

If a student drops a course during the first week of classes, the course will not be reflected on the transcript. Students who withdraw from a course after the first week of classes, and until the date set in the Academic Calendar for withdrawing with a "W", will receive a grade of "W" on the transcript. Students must go to their School office to withdraw from a course. After this date, up until the date set in the Academic Calendar (approximately two weeks before the last day of classes), student may drop a course with either the grade WP (withdrawn passing) or WF (withdrawn failing, not computed in the GPA) based upon the student's academic status in the course at the time it is dropped. Dropping a course is not allowed after the last date for WP/WF specified in the Academic Calendar.

The student is responsible for understanding the implications that may occur from dropping one or more courses (examples: financial aid, housing, health and/or auto insurance eligibility, NCAA regulations, and others).

#### **Examinations**

Final written examinations may be administered at the discretion of the instructor. Every instructor schedules other tests and examinations that, in his or her judgment, are required either by the objectives of the course or by the specific needs of the students. Credit will not be granted in any course until all assignments and examinations in that course have been completed. Instructors will hold final examinations on file for a period of one year.

When a student has missed a final examination for some valid reason, a make-up examination may be taken. The make-up examination must be taken within one month from the closing of the term at the convenience of the instructor. Once taken, no final examination will be re-administered.

#### **College Proficiency Examinations, Noncollegiate Sponsored Instruction, and Experiential Learning**

Siena participates in the College-Level Examination Program (CLEP), Excelsior College Examination Program, the American College Testing Proficiency Examination Program (ACT/PEP), the National Program on Noncollegiate Sponsored Instruction (NPONSI), and the American Council on Education (ACE). Siena also offers the opportunity to earn credit through portfolio assessment of experiential learning.

Students who have attained satisfactory levels of competency in college subjects outside of the traditional classroom may earn college credit through these means, but only in subject areas offered at the College. All credit earned in this manner must be approved by the student's School Dean. The total number of credits that any one student may earn by proficiency examination, noncollegiate sponsored instruction and portfolio assessment of experiential learning is thirty-six (36) credits; a grade equivalent to Siena's C- must be attained.

### **Definition of Student**

Siena College students must not only comply with all degree requirements to obtain a Siena College degree, but also must follow all College rules and policies affecting their student status, including, but not limited to, those set forth in this Catalog, as well as those enumerated in *Siena Life*, the student handbook. For this reason, it is important to understand who is considered a "student."

The term "student" includes all persons:

1. taking courses at Siena College, full-time or part-time, either on a matriculated or non-matriculated basis, pursuing undergraduate, graduate, certificate or professional studies;
2. who have been notified of their acceptance for admission;
3. who are living in Siena College residence halls, although not enrolled in this institution;
4. who withdraw or stop attending after engaging in behavior that is subject to disciplinary sanctions under College policies;
5. who are not officially enrolled for a particular term but who have a continuing relationship with the College and engage in behavior that is subject to disciplinary sanctions under College policies (including but not limited to those students on voluntary or mandated medical leave, study abroad, leaves of absence from Siena College even if taking classes at another institution; or
6. who have completed all degree requirements until commencement exercises are complete and they have vacated the campus.

### **Academic Classification**

Matriculated students are classified according to the number of credits they have completed toward their degrees, as follows:

Freshman 0 - 23 credits  
Sophomore 24 - 53 credits  
Junior 54 - 83 credits  
Senior 84 or more credits.

Unfinished coursework from prior semesters, (I grades), and coursework in which a student is currently enrolled do not count in the calculation of academic classification.

Students not enrolled in a degree or certificate program are classified as "Non-matriculated" or "Auditor."

Students enrolled in the Accounting; Computer Science; Education; Information Systems; International Studies, Foreign Languages and Business; Peace Studies; Pre-Law Studies; Revolutionary Era Studies; Risk Management; and Theatre Certificate Programs are classified according to their program.

### **System of Grading**

Credit hours are earned for any grade of D- and higher. Quality point values are assigned for each credit hour awarded as follows:

A=4.0 quality points per credit hour; A-=3.7; B+=3.3; B=3.0; B-=2.7; C+=2.3; C=2.0; C-=1.7; D+=1.3; D=1.0; D-=0.7; F=0.0; U=0.0 (Failure due to excessive absence); I=0.0 (Incomplete).

No other grades carry quality point values.

Other grades are:

Au     Auditing  
W     Withdrawal from the course prior to the published deadline.

- WP Withdrawal from the course after the published deadline while passing.
  - WF Withdrawal from the course after the published deadline while failing.
- And, for courses on the Pass/Fail Option:
- P Pass (Letter grades A through D-)
  - Z Failure (Letter F and U)

The Incomplete grade I is assigned to students who have missed a final examination because of illness or some other serious reason. The students must make up the examination within one month after the close of the term at the convenience of the instructor; otherwise the I grade is converted to an F. For GPA purposes, I grades are calculated the same as F grades. All I grades must be reconciled prior to receipt of a degree. Grades appearing on a student’s academic record at the time of graduation will not be changed to any other grade subsequent to the graduation date.

### Grade Reports

Mid-semester grades are requested from faculty for all students. If these grades indicate that the student’s progress is generally unsatisfactory, the student is informed directly by letter. Mid-semester grades are for internal purposes only and are not included on a student’s official transcript.

A final grade report is made available to every student shortly after the close of each semester. In the event that the office of academic affairs determines that there has been a violation of Siena’s academic integrity policy, Siena reserves the right to adjust any grade in line with the findings of the Academic Integrity committee.

### Appeal of Assigned Grades

A student who believes that an error has been made in assigning a grade should discuss the basis upon which the grade was determined with the instructor within 60 days of receipt of the grade report. If after this review the student is not satisfied with the assigned grade, an appeal may be made to the Department Chair. Such appeal should be made in writing, stating the basis upon which the grade is questioned and requesting a departmental review. If following the review the student is not satisfied with the departmental decision, appeal may be made to the School Dean. If the situation is not resolved at the school level, a final determination for disposition of the matter will rest with the Vice President for Academic Affairs.

### Scholarship Indices (GPA)

The scholarship index for every student is determined at the conclusion of each semester. The index is obtained by dividing the total number of quality points earned by the total number of credits attempted. A cumulative quality point average of 2.0 is required for graduation.

The following example illustrates how the scholarship index is determined for one semester:

<u>Course No.</u>	<u>Course Title</u>	<u>Grade</u>	<u>Credit Hours Attempted</u>	<u>Quality Points</u>	
FOUN—100	First Year Seminar I	A	3	12	
HIST—101	Shaping of the Contemporary World	A	3	12	
PSYC—100	General Psychology	B-	3	8.1	
MATH—010	Finite Mathematics	B+	3	9.9	
FREN—101	Fundamentals of French I	F	3	0	
			<hr style="width: 50%; margin: 0 auto;"/>	<hr style="width: 50%; margin: 0 auto;"/>	
			15	42	
	Quality Points Earned		<u>42</u>	=	2.8 Scholarship Index
	Credit Hours Attempted		15		

The cumulative quality point index is determined by dividing the total number of quality points earned by the total number of credit hours attempted for all Siena courses in which grades with quality points were

possible. Courses taken under the Hudson-Mohawk Association are included in the calculation of the grade point average (GPA).

### **Repeated Courses**

A student may repeat a course in which a C- or less has been awarded. Both grades will appear on the student's transcript, but the lower grade will not count in cumulative totals. Only the higher grade will be used in computing the cumulative grade point average (GPA). Repeated courses may be taken at Siena or at another institution and transferred back to Siena. Credit for the course will be given only once, unless the course is designated in the catalog as "repeatable for credit." If repeating a course is not required in order to make progress towards a graduation requirement, the course does not count towards full-time status. A change to part-time status (less than 12 credit hours per semester) could affect a student's financial aid eligibility and other eligibility. A student with a question about status when repeating a course should discuss this matter with the Registrar or Financial Aid Office.

### **Transcript of Record**

All requests for transcripts must be made in person or in writing. New or first-time registered students will be charged a one-time transcript fee of \$25.00 which covers up to 20 transcripts. An official transcript, bearing the seal and an authorized signature of Siena, will be issued upon the request of the student. A transcript or any information concerning a student may not be released if there is an outstanding indebtedness to the College. Transcripts are prepared in the order in which they are received, so it is recommended that all requests be made well in advance of the date the transcript is needed. After 20 transcripts, a student may be charged \$5.00 per additional transcript. Fees are no longer assessed to graduates and former students for transcript requests.

### **Honor Lists**

To be eligible for semester honor lists, a student must have completed no fewer than 12 credit hours as a full-time matriculated student or no fewer than 8 credit hours as a part-time matriculated student.

*Deans' List:* Requires a term index of 3.5 to 3.89.

*President's List:* Requires a term index of 3.9 or above.

### **Honor Societies**

*Alpha Kappa Alpha* is the Honor Society of Siena College. Membership in this society is the highest award granted to a student at graduation. To be eligible, a student must have completed 54 credit hours at Siena College, have achieved a minimum index of 3.5 for each year (Fall/Spring semester average) in attendance (including study abroad), have completed a degree application for the appropriate term and must show a significant record of involvement in voluntary service activities during the course of his/her Siena studies. Any students transferring a minimum of 9 credits from any school to Siena are required to have met the same academic standards at the other institutions. Students graduating in January or August who meet the guidelines will be invited to apply for the following May's induction.

*Alpha Kappa Delta*, Alpha Psi chapter, is the International Honor Society in Sociology. Sociology major and minors are nominated for membership by the Sociology Department based on a record of excellence in Sociology coursework and overall scholarship.

*Alpha Mu Gamma*, Alpha Tau Chapter, the National Foreign Language Honor Society, recognizes achievement in the field of Foreign Languages. To be eligible, students must have completed four courses above the elementary level, have a 3.0 GPA overall and a 3.5 average in language courses.

*Beta Gamma Sigma*, membership in Beta Gamma Sigma is the highest recognition a Business student anywhere in the world can receive in an undergraduate or master's program at a school accredited by AACSB International.

*Delta Epsilon Sigma*, Beta Psi chapter, is a National Scholastic Honor Society for students in Catholic colleges and universities. Eligible student candidates for induction will have completed 84 credits or more by February 1, with a cumulative GPA of 3.8 or higher.

*Kappa Delta Pi*, Alpha Epsilon Beta chapter, is the International Honor Society in Education. KDP was established to foster excellence in education and promote fellowship among those dedicated to teaching. The mission of Kappa Delta Pi is to sustain an honored community of diverse educators by promoting excellence and advancing scholarship, leadership, and service while helping committed educators be leaders in improving education for global citizenship. To be eligible, students must have completed at least 30 credit hours of collegiate course work; have at least 12 credit hours in education course work in progress, or completed; demonstrate leadership attributes; have a cumulative grade-point average of 3.0 or greater; and receive an invitation to membership from the Alpha Epsilon Beta chapter.

*Omicron Delta Epsilon*, Beta Mu chapter, is the International Honor Society in Economics. Membership in this society is in recognition of academic excellence in Economics.

*Phi Alpha* Honor Society, Delta Upsilon chapter, is the National Honor Society for students, faculty, and practitioners promoting humanitarian goals and recognizing the attainment of academic excellence and scholarship related to Social Work. Student candidates must be admitted into the Social Work program, have completed the first semester of their senior year, have completed at least 15 credits in Social Work, and have a minimum GPA of 3.25 in Social Work and 3.0 overall.

*Phi Alpha Delta* is the Pre-Law Honor Fraternity.

*Phi Alpha Theta*, Omicron Xi chapter, is the National Honor Society in History. To be eligible, students must complete 12 credit hours of History, obtain a GPA of 3.4 in History and 3.0 overall, and receive overwhelming support of the History Department faculty.

*Phi Lambda Upsilon* is the National Honor Society in Chemistry.

*Phi Sigma Tau*, New York Kappa chapter, is the National Honor Society in Philosophy. Students are nominated by the Philosophy Department for membership.

*Pi Gamma Mu*, Alpha Gamma chapter, is the International Social Science Honor Society. Membership in this society is in recognition of academic excellence in the Social Sciences.

*Pi Mu Epsilon*, New York Alpha Epsilon Chapter, is the National Mathematics Honorary Society. Membership is based on scholarly achievement.

*Pi Sigma Alpha*, Alpha Beta Iota chapter, is the National Honor Society in Political Science. The Political Science Department admits students who have demonstrated academic excellence in the study of Political Science.

*Psi Chi*, the International Honor Society in Psychology, admits students who have attained high academic achievement in this field.

*Sigma Pi Sigma*, the Siena Chapter of the National Physics Honor Society, recognizes students with high scholarship and achievement in Physics.

*Sigma Tau Delta*, the English Honor Society, is open to students with at least 15 credits in English, a 3.3 minimum GPA overall, and a 3.55 GPA in English. Selection is subject to departmental approval.

*Sigma Xi*, the Scientific Research Society, is an honor society for scientists. Sigma Xi's goals are to advance scientific research, to encourage companionship among all scientists, and to assist the wider understanding of science. Outstanding research students in the School of Science at Siena may be nominated to associate membership.

*21st Century Leaders Society* is the honor society for School of Business majors. Members are selected based on a combination of academic achievement and demonstrated outstanding leadership characteristics. The society is endowed through a donation from Vincent Puritano '59.

*Upsilon Pi Epsilon* is the National Computer Science Honor Society, which recognizes academic excellence at both the undergraduate and graduate levels in the computing and information disciplines.

*Who's Who Among Students in American Universities and Colleges* is an annually published roster of college students who have distinguished themselves on campuses across the nation. To be eligible for membership, Siena students must place in the top quartile of their graduating class and demonstrate outstanding contributions to the Siena community.

### Graduation Honors

Three distinctions are awarded to undergraduates, based on their attainments in scholarship during the entire college course:

1. *Summa Cum Laude*, or the highest honors, to those having a scholarship index of 3.90 or higher.
2. *Magna Cum Laude*, or high honors, to those having a scholarship index between 3.70 and 3.89.
3. *Cum Laude*, or honors, scholarship index between 3.50 and 3.69.

In order for a student to qualify for graduation honors the person must have completed 54 credit hours at Siena College. Students pursuing second degrees must have all Siena credits included in the computation and are subject to the 54 credit minimum.

### Good Conduct Standing

A student is in good conduct standing if s/he has no outstanding disciplinary charges against her/him. Disciplinary action can be taken against a student after all academic degree requirements have been met but before a student has participated in Commencement exercises and vacated the campus. Moreover, the College reserves the right to withhold a degree or revoke a degree as set forth below.

### Good Academic Standing

A student is in good academic standing if he or she is matriculated at Siena College and is considered to be making satisfactory progress toward a degree.

For enrollment verification purposes a student registered for a minimum of 12 credits at the close of the last day to add a semester course as defined by the academic calendar is classified as a full-time student for the duration of that semester. Students registered for fewer than 12 credits as of that date are classified as part-time students for the duration of the semester.

### Academic Probation and Academic Dismissal

To obtain a degree, a student must have at least a "C" average (2.00 cumulative grade point average) for all Siena coursework. If a student's cumulative GPA falls below a 2.00, the student will be subject to Academic Probation or Academic Dismissal based on the following chart after the Fall and Spring semesters.

Category	0-22 credits*	23-37 credits*	38-52 credits*	53-67 credits*	68-82 credits*	83 or more
Academic Dismissal**	Below 1.00	Below 1.50	Below 1.60	Below 1.70	Below 1.80	Below 1.90
Academic Probation***	From 1.00 to below 2.00	From 1.50 to below 2.00	From 1.60 to below 2.00	From 1.70 to below 2.00	From 1.80 to below 2.00	From 1.90 to below 2.00

\* Includes transfer credits and earned credits

\*\* Any student dismissed from the College for poor scholarship may not apply for readmission unless he or

she has attended a recognized college for one year and has attained a record of satisfactory scholarship. Documented continuous full-time employment or service in the military will be considered as possible substitutes for academic accomplishments. However, in all cases the final decision for readmission shall be at the discretion of the Vice President for Academic Affairs.

\*\*\* Any student who is currently on Academic Probation must participate in academic support programming. Failure to comply may result in a "Hold" being placed on the student's account, or the cancellation of the student's current or next semester registration. The cancellation of a student's current registration will result in the immediate withdrawal or dismissal of the student from the College. Any student who earns a 1.0 or less in any given semester, regardless of their cumulative GPA, will be scheduled by the Academic Advising Support Office for academic support programming (LEAP) in the following semester.

### **Graduation**

Prospective graduates must file a degree candidate application with the Registrar according to the dates for filing as published in the class schedule and student newspaper in order to be considered for graduation.

Any student who potentially meets all graduation requirements in his/her last semester as of the day after the last day to withdraw from a course with a "WP/WF" will be allowed to participate in commencement activities. All candidates who have completed degree requirements at the end of the spring semester should be present at Commencement. Others who may have completed degree requirements in the previous fall or summer semester are invited to participate. The Registrar makes the final decision regarding participation in Commencement activities. Participants in Commencement exercises wear cap and gown. Diplomas will be mailed to graduates upon the completion of all degree requirements.

For seniors who expect to graduate in May, official transcripts recording transfer credits earned at any other college must be received by the Registrar no later than March 1 of their senior year. Students are responsible for having transcripts from other colleges sent to Siena and should check with the Office of the Registrar before March 1 to be sure that the transcript has been received.

Each degree candidate must settle all accounts with Student Accounts before a diploma is granted.

### **Withdrawing from the College**

Please see the "Withdrawals and Refunds" section located under "Undergraduate Tuition and Fees".

### **Separation from the College**

Since a student's continued presence as a recognized member of the Siena community is subject to the authority of the College, the College reserves the right, at the discretion of the administration, to enforce all regulations concerning a student's academic performance and, if necessary, to cancel registration, refuse academic credit or deny the Bachelor's degree. The conditions that may warrant dismissal for academic deficiencies are explained above.

### **Academic Integrity**

The concept of academic integrity lies at the very heart of any college. This is particularly true of Siena with its strong Franciscan tradition and its dedication to fostering sound moral growth. In such an environment, academic dishonesty cannot be tolerated. Students who commit such acts expose themselves to punishments as severe as dishonorable dismissal from the College.

Academic dishonesty can take different forms, including, but not limited to: cheating [dishonesty in a test situation], plagiarism [dishonesty in the presentation of materials in a paper or report], and computer abuse. In any situation in which a student is unsure of what constitutes academic dishonesty, it is the student's responsibility to raise the question with his or her instructor. It is also the student's responsibility to be familiar with the student guidelines on academic honesty, "Academic Integrity and the Siena Student," which can be found in *Siena Life*.

The Siena Committee on Academic Integrity hears cases of alleged academic dishonesty. This student/faculty committee reviews evidence for and against the accused. If the student is found

guilty, the committee will determine the appropriate sanction(s), which may include failure of the course, suspension from the College, or permanent dismissal. A statement of the reasons for such sanctions will be placed in the student's file.

Alleging ignorance of what constitutes academic dishonesty or of the College's policy on the subject will not be considered a valid explanation or excuse.

### **Student Records (FERPA) Family Educational Rights and Privacy Act**

The Family Educational Rights and Privacy Act of 1974 ("FERPA"), 20 U.S.C. § 1232g and 34 CFR Part 99, governs students' access to and confidentiality of their education records maintained by Siena College. The College notifies students annually of their rights under FERPA. Students have the right to file a written complaint with the Office of Family Compliance at the U.S. Department of Education if they believe the College failed to comply with FERPA.

### **Education Records Defined**

Education records are any records (in handwriting, print, tapes, film, computer or other medium) that are directly related to a student and maintained by the College or by a party acting for the College. They are not: 1) records that are kept in the sole possession of the maker, such as a faculty member, who makes the record for a personal memory aid and does not share the record with anyone other than a temporary substitute for him or her; 2) records created and maintained by the College's Office of Public Safety for law enforcement purposes; 3) employment records; 4) records made or maintained by medical professionals if the records are used only for treatment of a student and made available only to those persons for providing the treatment; or 5) alumni records which contain information about a student after s/he is no longer in attendance at the College.

### **Student Access to Records**

Records available for student inspection are those that fall under the definition of education records and generally include academic records, financial aid records and disciplinary records. References, ratings and/or observations completed before 1-1-75 are not available to students. Students do not have the right to inspect any financial data and income tax forms submitted in confidence by their parents in connection with an application for, or receipt of, financial aid. Concerning a record that contains information relating to more than one student, student access is limited to the portion of the record that pertains only to him or her.

Requests to inspect education records should be made in writing to the specific College office maintaining it. The records, files and/or data will be made available no later than 45 days from the time the written request is received.

Materials will be reproduced at the cost of \$.50 per page for records and \$5.00 for a transcript.

### **Amendment of Education Records**

A student may request in writing an amendment to his or her education record that s/he believes to be inaccurate, misleading, or otherwise in violation of his or her privacy rights. If upon review of the student's request and record, the College determines that the amendment is not warranted, the student will be advised accordingly and given the right to a hearing conducted by an administrative officer of the College who does not have a direct interest in the outcome. At the conclusion of the hearing, the College will either amend the record and inform the student in writing of the amendment or decide that the education record as written should stand. If the College determines that the record should not be changed, the student will be given the right to place a statement in the record commenting on the contested information and/or why s/he disagrees with the College's decision.

### **Disclosure of Education Records**

Siena College will disclose information from a student's education records only with the student's prior written consent, except that the College will not obtain the student's consent if the disclosure is:

1. To other “school officials” whom the College has determined to have legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research or support staff position, including health or medical staff; a person elected to the Board of Trustees; a person employed by or under contract with the College to perform a special task, such as an attorney, auditor, or outside vendor; a person who is employed by the College’s Office of Public Safety; and a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if s/he is performing a task that is specified in his/her job description or contract agreement; performing a task related to the student’s education; providing a task related to the discipline of a student; providing a service or benefit relating to a student or student’s family, such as health care, counseling, job placement or financial aid; or maintaining the safety and security of the College;
2. To authorized officials, such as officials of other schools in which the student seeks to enroll, certain federal, state and local officials, or specified officials for audit or evaluation purposes;
3. To accrediting organizations or organizations conducting certain studies for or on behalf of the College;
4. In connection with a student’s application for, or receipt of, financial aid;
5. In the case of an emergency if the knowledge of such information is necessary to protect the health and safety of the student or other persons;
6. To comply with a judicial order or lawfully issued subpoena or is related;
7. to legal action involving the College and the student;
8. In connection with certain disciplinary actions;
9. To parents of a dependent student, as defined in section 152 of the Internal Revenue Code of 1986. The College may, but is not required to, disclose information to parents of a dependent student; however, the College will not do so upon evidence that there is a court order, state statute or legally binding document relating to such matters as divorce, separation or custody that specifically revokes their rights as a parent. The College does not have an obligation to disclose any financial information about one parent to another;
10. Information the College has designated to be Directory Information.

**Directory Information & Request to Prevent Disclosure:** The following is considered Directory Information, **which may be disclosed to third parties without the student’s prior written consent:** the student’s name, address (both local and permanent, to include email address), telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, photographs, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. Directory Information will not be made available to the party requesting it unless the appropriate administrative officer of the College has considered and approved the request.

Students may choose to suppress the release of the above Directory Information by written request to the Registrar’s Office. Student who do so will have a confidentiality hold on all of their records. If a student has a confidentiality hold on his or her records, not only will his or her information not appear in any College directories, but the College will also be unable to place the student’s name in the commencement program at the time of graduation, or verify the student’s degree, major or enrollment for possible employment, credit card applications, insurance, or mortgage qualifying purposes. A student who has a confidentiality hold on his or her records may rescind a “no release clause” at any time in writing to the Office of the Registrar.

## **Siena College Health Requirements**

### **A. Policy Statement**

The Siena College Health Service will comply with, uphold and enforce relevant provisions of the New York State Public Health Law, Article 21, Title VI, and Section 2165 as it pertains to this college. Siena College is committed to providing a safe and healthy environment for its students with regards to communicable diseases, including Measles, Mumps, Rubella, Tuberculosis, Tetanus, Diphtheria, Pertussis and Meningitis. The College recognizes and accepts its responsibility under applicable state law and considers recommendations from the America College Health Association and U.S. Centers for Disease Control & Prevention.

### **B. Health Insurance**

All full time students are required to have health insurance. Full time students that do not have health insurance will be billed for and receive insurance through the Aetna Student Health Policy. If a student has health insurance coverage, they will be required to complete an online waiver verifying their coverage. It is recommended that before a waiver is processed, students will check with their health insurance provider to determine what limitations there may be for coverage in the Albany area. Many plans do not provide benefits “out of network” and many networks do not extend to the Albany area. If this is the case with your health insurance coverage, it is suggested that you do not waive the Aetna Student Health policy. Part time students may voluntarily enroll in the Aetna Student Health Insurance plan.

**C. Definition of Student**

Part-time student — Any person enrolled in a minimum of 6 but fewer than 12 credit hours per semester.

Full-time student — Any person enrolled in 12 or more credit hours per semester.

**D. Specific Requirements**

1. All full-time students are required to submit a completed Siena College Health Record. The physical exam must be performed within 1 year of admission for new students and students that have been readmitted to the college after an absence of two years or more.
2. Full-time and part-time students born after January 1, 1957, are required to provide proof of immunity to Measles, Mumps, Rubella, Tetanus/Diphtheria at the time of registration. Students born before January 1, 1957 are considered immune and do not need to provide proof of immunity. Documentation of tuberculosis status is also required, regardless of age.
  - a. **Measles** (rubeola): Proof of immunity shall consist of one of the following:
    - two immunizations given after 1967, at least 30 days apart, on or after the first birthday; evidence of the disease documented by a physician (MD or DO); or documentation of an adequate immune titer.
  - b. **Mumps** (infectious parotitis): Proof of immunity shall consist of one of the following:
    - one immunization given after 1967, on or after the first birthday; evidence of the disease documented by a physician (MD or DO); or documentation of an adequate immune titer.
  - c. **Rubella** (German Measles): Proof of immunity shall consist of one of the following:
    - one immunization given after 1967, on or after the first birthday; evidence of the disease documented by a physician (MD or DO); or documentation of an adequate immune titer.
  - d. **Tetanus/Diphtheria**: Evidence of an initial series of tetanus/diphtheria vaccinations as a child and/or recent vaccination with either tetanus toxoid or combined tetanus/diphtheria/pertussis toxoid within 10 years.
  - e. **Tuberculosis**: Evidence of a current (within 1 year of college entrance) Tuberculosis screening is required which includes a completed risk assessment and skin testing if certain risks are identified. Positive skin tests will require a referral to the local County Public Health Department.
  - f. **Meningitis**: New York State Public Health Law requires that all students taking more than 5 credit hours indicate the date they have received immunization against Meningitis disease. If after reviewing information regarding Meningococcal/Meningitis disease, the student chooses not to receive a Meningitis vaccine, the student must sign a waiver indicating they have decided to decline the vaccination.
3. It is strongly recommended, but not required, that all students be immunized against Hepatitis B, Meningitis, and Varicella.
4. Students seeking religious exemption from these requirements must comply with applicable state regulations. Students under 18 years of age must submit a written statement signed by his/her parents or guardian stating that they hold genuine and sincere religious beliefs contrary to the practice of immunization. Students 18 years or older must submit a statement themselves to qualify for religious exemption. This statement must describe the beliefs in sufficient detail to permit the college to determine that the beliefs are religious in nature (not philosophical), and sincerely and genuinely held. Students that qualify for religious exemption will be required to leave the campus in the event of an outbreak of one or more disease(s) and will remain away from campus until two weeks after the outbreak is over.
5. Medical exemptions from this requirement may be granted at the discretion of the Health Service Director for reasons such as pregnancy, history of anaphylaxis, AIDS, and other relevant disease states. Non-immunized students will, at the discretion of the Health Service Director, be required to leave the college in the event of an outbreak of one or more disease(s) and will remain away until two weeks after the outbreak is over.
6. All students (as defined above) must provide health information on the appropriate form and submit it to the Siena Health Service. The Health Service will maintain the records while the student is in continuous attendance at the College.
7. Any individual enrolled in 5 credit hours per semester or less, or any part-time student at Siena

who enrolls full-time in the future must, at that time, submit a completed Siena College Health Record and meet all other requirements of a full-time student as set forth in this policy. Any individual enrolled in 5 credit hours per semester or less at Siena who enrolls part-time in the future must, at that time, meet all the requirements of a part-time student as set forth in this policy.

**E. Enforcement of the policy:**

1. Students who fail to comply with this policy, including but not limited to any failure to supply complete health and immunization records to the College prior to June 21st for the fall semester and January 2nd for the spring semester. After 30 days from the start of any semester, the College will disenroll any student who does not have the required immunizations. This means that the student is not allowed to attend any class or to be on College property. In addition, if the student is in residence, they must vacate their residence hall room within 24 hours and are not allowed to be in or around the residence halls or on College property until all immunizations are complete and clearance has been obtained from Health Services. Note: Any student can receive at cost the required immunizations immediately by scheduling an appointment with the Health Services. Once a student has provided the necessary documentation from a health care provider that the immunizations are complete or has received clearance from the Health Services they are allowed to resume classes and return living in the residence halls.
2. Students with positive tuberculin tests, including those who have had BCG vaccination, are required to report to the Albany County Health Department Chest Clinic or the Health Department in their county of residence. Failure to comply with health department directives will result in the penalties listed in the preceding paragraph.

**F. Reporting**

1. Siena College complies with the requirement to submit yearly reports of immunization statistics including reports of diagnosis of communicable disease, as they occur, as required by NYS Department of Health regulations.
2. Student immunization records contain medical information and will be maintained in a confidential manner. Access to these records will be limited to personnel whose job duties require information from these records. No records can be released without the student's written consent or for a student under the age of eighteen, the consent of a parent or guardian. All medical records will be stored for seven years.

## **College Resources**

### **Library/Audiovisual Resources J. Spencer and Patricia Standish Library 518-782-6717**

The J. Spencer and Patricia Standish Library is a teaching library providing educational services, materials, and information to support the learning goals and research needs of the students and faculty. The library collection of over 360,000 volumes consists of books, journals, microforms, compact discs, videocassettes, and a growing number of electronic information sources. Over 20,000 journals are available through electronic resources or in print. Patrons can access the online catalog, the library's Web site, and many other electronic resources through the campus network and the Internet. Professional librarians are on duty every day during the academic terms to assist students and faculty in their course assignments and research. Other services include individual and group instruction in the effective use and evaluation of print and electronic resources, interlibrary loan, course reserves, rush cataloging, and media services. Through local and national resource sharing networks and agreements, Siena students and faculty have access to the holdings of libraries in New York State and throughout the United States.

During the academic year the Library is open Monday – Thursday 8:00am to 1:00am; Friday 8:00am to 11:00pm; Saturday 9:00am to 11:00pm; and Sunday 11:00am to 1:00am. Variations in the scheduling during other periods are posted in the lobby and on the Library's Web site ([www.siena.edu/library](http://www.siena.edu/library)).

The J. Spencer and Patricia Standish Library offers attractive and inviting spaces for individual study and collaborative learning. Print, audiovisual and electronic resources are located in close proximity. Public workstations give students immediate access to databases and the Internet. Audiovisual Services provide

videocassettes, compact discs and other audiovisual resources; advanced listening and viewing facilities; and media support for classes and other educational programs.

### **Information Technology Services**

Information Technology Services provides access to computing services for all students and academic departments of the College. The staff and facilities are dedicated to student and faculty needs and are available to support them in their coursework and research. Contact the Helpdesk at (518) 786-5000 for students and 782-6000 for faculty/staff.

Services available to students and faculty include: Helpdesk support, "How To..." documentation, and frequent training seminars. Equipment provided includes desktop and laptops (Windows and Macs) as the primary computer for faculty and staff; desktop computers in labs and study spaces throughout the campus for students, laser printers (B & W as well as color) and scanners. Two computer labs are available 24 hours per day, 7 days a week. The 24 hour lab in the library also houses the Student Help Desk. All students have accounts that provide access to electronic mail, the Internet, WiFi, and network file, print and application services.

All academic and residential buildings are interconnected with a high speed network. Every student residence space includes a connection point for access to the College's network and the Internet, and the students can use wireless throughout the college.

More than a dozen laboratories provide PCs and Macs to meet the general and specialized needs of students. In addition, all college classrooms provide computer and multimedia projection technology as well as other electronic enhancements. A dedicated server supports the library catalog and bibliographic search system.

Standard supported software includes Microsoft Word (word processing), Excel (spreadsheet), Access (database), and PowerPoint (presentations). The Oracle database system is also available. Statistical tools include industry leading SPSS; Mathematica is used extensively in Mathematics and other courses. Additionally, Java, PHP, Python, Perl, and C++ are used in a variety of courses. Many specialized software packages are also used in the lab and classroom facilities for languages, humanities, social sciences, natural sciences and business. Faculty and students use the Blackboard Learning Management System with support provided by instructional technology from ITS. The college uses Google Apps for Education as its e-mail and collaboration tool. Students will retain their Siena Google account on becoming alumni.

### **Computer Ethics**

This is a summary of the College's Computing Use Policy. The complete document is published in Siena Life, the student handbook, and is available on the Information Technology Services website ([www.siena.edu/its](http://www.siena.edu/its)). The computing facilities are a resource of the College with access given for academic and research use. Accounts are to be used solely by the person to whom the account was given.

In order to continue to provide computer services to students and faculty at Siena, it is expected that all persons who are given access to the computing facilities will conduct themselves responsibly and professionally.

Student abuses of the privilege of access to the computing facilities will be adjudicated via the College's judicial system, following stated College policy on dishonesty and theft. Abuses of privilege include (but are not limited to):

- Use of another person's account (with or without the owner's permission).
- Reading, printing, altering, or deleting information from another account without permission of the owner.
- Damaging, modifying, replacing, or copying any licensed software.
- Damaging, modifying, or replacing any computer equipment.
- Use of any hardware or software in the pursuit of personal monetary profit.
- Harassment of any individual via use of any part of the Siena computer network.

The staff of Information Technology Services may access users' private files during the investigation of possible abuses, or by direction of the President or Vice President of the college.

### **Emergency College Closing**

In the case of an emergency, such as a pandemic flu outbreak, natural disaster or like circumstance beyond the College's control, where the College is forced to close, the College reserves the right to continue delivery of services through alternative means, including, but not limited to, remote instruction or changes in the weeks of a normal semester, in order to meet academic requirements. The College also reserves the right to invoke a different refund policy that will take into consideration the College's efforts to continue the delivery of academic services.

### **Snow Day Procedure**

In the event of extreme weather conditions, please listen to your radio or check the Siena website. If classes are to be cancelled, every effort will be made to contact radio stations by 6:30 a.m. Announcements will be made on the following stations: WRGB, WVCB, WGY, WGNA, WPTR, WFLY, WROW, WTRY, WKLI, WKAJ.

Students and faculty are expected to use good judgment and discretion, since road conditions and personal circumstances may vary. Faculty should not penalize students who present a valid excuse for missing classes on a snow day.

### **Faculty Attendance Policies**

1. Faculty members establish their own class attendance policies and must provide these policies to students at the beginning of the semester (in writing and/or posted on a public website). This policy should also be verbally communicated during the first class (and laboratory) session of the semester (within the drop/add period).

For all courses that have any required activities scheduled outside of class time, faculty must include the required activities with their attendance policy. In addition, students must be given sufficient advance notice, at least 4 weeks in advance of the date and time of these activities.

For all courses that will conduct exams outside of class time, faculty must include with their attendance policy the time and the day (e.g., Wednesdays 6-8 p.m.) at which the exams will be administered.

Faculty members must provide the attendance policy for each of their next semester's classes (and labs) to their department heads within 48 hours of the final submission of the next semester's schedule. The academic deans must post these attendance policies no later than the date that the schedule for the next semester is made available on-line to students.

2. It is left to each faculty member's discretion as to whether missing class for any purpose (bereavement, health/medical, personal business, varsity intercollegiate athletic contest, or any other activity) is an excusable absence. Faculty should establish attendance policies that treat all students equally. If a faculty member excuses a student for participation in any other college-sponsored activity, the faculty member must also excuse a student for participation in a college-sponsored varsity athletic contest.

3. At the beginning of the semester, faculty must review the scheduled college-sponsored activities for each student in her/his class (who brings these activities to the faculty member's attention) and must determine how the absences will be handled. If the absences will affect a student's grade and/or the student's ability to successfully complete the course requirements, the student must be informed immediately (as early as is possible within the drop/add period).

4. Class attendance policies are not in effect during a vacation period (vacations as listed in the Academic Calendar) and between terms when classes are not in session, unless attendance at a class-related-activity is specified by the faculty member in the course syllabus at the beginning of the semester.

5. In conformance with College policy, when course exams are held outside of class time, if a student is absent due to a conflict with a scheduled contest, the student is "excused" and subject to the faculty member's policy regarding excused absence from an examination period.

6. It is often necessary to reschedule athletic contests after the semester has commenced (often due to weather-related cancellations). The Athletic Department and student-athletes should inform faculty of

these changes in schedule as soon as is possible. Faculty should be flexible and reasonable in handling these changes. For these cases, the stated attendance policy is in effect and the faculty member should as soon as is possible inform a student if the changes in schedule will affect the student's grade and/or the student's ability to successfully complete the course requirements.

7. If a post-season athletic contest, scheduled by the MAAC or the NCAA, conflicts with a course examination, an affected student is excused from the examination and the faculty member will provide a make-up exam (or other appropriate accommodation) at another time within the examination period or no later than 24 hours after the last day of the examination period.

8. The VPAA, Deans, and Registrar should attempt to make up the final examination schedule as early as possible. The earliest date would most likely be at the end of the last "add" date. Also, this would most likely involve changes in many practices, including the deadline for faculty requests for "examination exceptions/special-scheduling.

#### **Withholding Degree**

Siena College reserves the right to withhold awarding a degree pending the completion of the process set forth in the Student Code of Conduct, including the completion of all sanctions imposed, if any.

#### **Revocation of Admission and/or Degree**

Admission to or a degree awarded from Siena College may be revoked for fraud, misrepresentation, and/or criminal behavior which may place the College community at risk, or other violations of the Siena Code of Conduct, or for other serious violations committed by a student.

#### **Campus Crime Statistics**

Pursuant to federal law, Siena College compiles campus crime statistics, which are reported annually to the United States Department of Education. The Office of Public Safety will provide upon request all campus crime statistics as reported to the United States Department of Education. In addition, you may access the crime statistics at the following website: <http://www.siena.edu/pages/2782.asp>. Contact Public Safety at 518-783-2376.

#### **Compliance Statement**

Siena College is an equal employment opportunity and affirmative action employer and does not discriminate against employees or job applicants on the basis of race, religion, color, sex, age, national and ethnic origin, disability, marital status, veteran status, sexual orientation, gender identity, predisposing genetic characteristics, domestic violence victim status or any other status or condition protected by applicable federal or state statutes.

Siena College admits students of any race, religion, color, sex, age, national and ethnic origin, disability status, marital status, veteran status, sexual orientation, gender identity, domestic violence victim status or with a predisposing genetic characteristic to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, religion, color, sex, age, national and ethnic origin, disability, marital status, veteran status, sexual orientation, gender identity, predisposing genetic characteristics, domestic violence victim status or any other status or condition protected by applicable federal or state statutes in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school administered programs.

In compliance with Title IX Regulations implementing the Education Amendments of 1972 prohibiting sex discrimination in education, and with Section 504 of the Rehabilitation Act of 1973, prohibiting discrimination on the basis of handicap, the Equal Opportunity and Employee Relations Specialist has been appointed as Title IX and ADA/Section 504 Coordinator for Siena College.

#### **Changes in College Regulations**

The Board of Trustees of the College and/or College administration officials reserve the right to advance requirements for admission, to change the courses, the requirements for graduation, degrees, tuition, fees, and regulations affecting the student body. Such regulations will apply to all enrolled and new students, and will be effective on the day promulgated. It is the responsibility of the students to keep themselves informed of the content of all notices concerning such changes. Contact Academic Affairs at 518-783-2307.

## Courses of Instruction

Course descriptions include the course number, course title, and important text. Many courses will also include attribute codes (ATTR:). An attribute is a code used to indicate a special requirement that the course will meet (i.e., requirements for a major, a minor, for core, etc.) and will be important for monitoring a student's progress toward his or her degree. A list of the attribute codes and descriptions follows:

### Attributes

<u>CODE</u> <u>DESCRIPTION</u>	<u>CODE</u> <u>DESCRIPTION</u>
ACOM Academic Community Engagement	FSPH INSA Philosophy Dept Elec
AMSA American Studies Area A	FSPS INSA Political Sci Dept Elec
AMSB American Studies Area B	FSPY INSA Psychology Dept Elec
AMSC American Studies Area C	FSRS INSA Religious Stu Dept Elec
AMST American Studies	FSSW INSA Social Work Dept Elec
ANAP Admissions New Alumni Program	FSSY INSA Sociology Dept Elec
ARTS ARTS	GLST GS Minor - Elective
ASLT American Studies American Lit	HAM History-American
AXSR Math Auxiliary sequence	HAR History of the Arts
BCST Broadcast and Society	HEUR History-European
BCUL Broadcast and Soc upper level	HMAM History Minor American
BUS BUS	HMEU History Minor European
CAA Area Req-Aesth Dimensions	HNRS College Honors Program
CAH Area Req-Human Past	HNW History-Non-Western
CAL Area Req-Literature	HSMR Health Studies Minor Elective
CAN Area Req-Natural Science	HYHR History Honors Program
CAP Area Req-Philos Questions	IBME Intl Bus Minor Elective
CAQ Area Req-Quant Reasoning	IBMS Intl Bus Minr Hum/Soc Stu Elec
CAR Area Req-Relig Dimensions	INT Internship
CAS Area Req-Soc Sci Perspect	ISCE Info Systems Certificate
CDA Disc Req-Creative Arts	ISP Intl Studies Certificate Prog
CDE Disc Req-ENGL	JMN Criminal Justice Minor
CDH Disc Req-HIST	KEM Chemistry-Integrated Science
CDN Disc Req-Natural Science	LACS Latin Amer and Carib Studies
CDP Disc Req-PHIL	LAHP Latin Amer Historical Process
CDQ Disc Req-Quant Analysis	LALA Latin Amer Language Arts
CDR Disc Req-RELG	LASC Latin Amer Soci Cultural
CDS Disc Req-Social Science	LASS Latin Amer Socio Cul/Sci
CEMO Biology Req-Cellular Molecular	LSRG Lower Sociology Range
CFD Fran Concern-Diversity	LTAM Upper Level American Lit
CFH Fran Concern-Heritage	LTBA British or American Lit
CFJ Fran Concern-Soc Justice	LTIB Irish or Brit Lit Period Crse
CFN Fran Concern-Nature	LTPP English Major Special Topic
CFS Foundation Sequence	MCCP Comparative Multicultural Minr
CFY Core First Year Seminar	MCSY Macro-Sociology Elective
COMD Community Development	MGMT Management
DRAM Dramatist or Dramatic Movement	MHUL Upper Level Mathematics
EAB Environmental Appl Block	MINR Minor Requirement
ELIT English Lit	MORP Biology Req Morphology
ENB Environmental Science elective	MRKT Marketing Conc. for major
ENHR English Honors Program	MRST Medieval and Renaissance St
ENUL Upper Level English	MSAE Master of Accounting Elective
ENV Environmental Science elec	MULT Multicultural Studies Minor
EXCA Creative Expression	MUMD Multimedia
FRLT French Lit Course	NOEX No Exam
FSDV INSA Interdisciplinary Elec	ORPO Biology Req Organismic Popul
FSEN INSA English Dept Elective	PCST Peace Studies
FSES INSA Envir Stu Dept Elective	PHY History of Philosophy
FSPC INSA Peace Studies Elective	PHYL Biology Req Physiology

PHYS Physics-Advanced Physics  
 PLG Philosophy-Logic Courses  
 PNH Pre-Nineteenth Century History  
 PXEX Experimental Psych Courses  
 REA Revolutionary Era Stu Area A  
 REB Revolutionary Era Stu Area B  
 REC Revolutionary Era Stu Area C  
 RSET Rel Stu Ethics  
 RSHS Rel Stu Historical Studies  
 RSRT Rel Stu Religious Thought

RSSC Rel Stu Scriptural Studies  
 RSWR Rel Stu World Religions  
 RVEE Revolutionary Era Studies Cert  
 SGLB Sociology major global req  
 SPLT Span Literature Course  
 SUB1 Substitution for Registrar Use  
 SUBS Substitution for Registrar Use  
 SYUR Upper range Sociology El  
 WRIT Writing  
 WSTU Women's Studies Minor Elective

## **Multidisciplinary Majors, Minors, Certificates, and Courses**

### **Academic Community Engagement**

Dr. Mathew Johnson '93, Director

The Office of Academic Community Engagement includes the following programs:

The **Bonner Service Leaders Program** is a multi-year, intensive program that integrates academics, community service, and leadership/professional development. The **AmeriCorps VISTA Fellows Program** is a post-graduate, full-time, academically grounded, year-of-service with a Community Partner in the Capital Region. The **Academic Service Learning and Community-Based Research Program** trains and supports faculty, students, and community partners engaged in ASL and CBR. The **Academic AmeriCorps Program** works with students in any major that requires or includes a community placement, practicum, or internship to provide access to AmeriCorps Segal Education Awards for those students. The **Global Service Internship Program** is a 5 week full-full time summer internship program with NGO's around the world. The **Summer Service Scholars Program** is a full-time 8 to 10 week summer internship program with a local community partner in the Capital Region.

### **Certificate in Community Development**

The Certificate in Community Development is designed to offer any interested Siena student an academic pathway to critically examine community development approaches, and in particular those involving higher education institutions, for addressing the challenges faced by the communities in which they civically engage. The Certificate is open to any major. Students in the program will critically examine their long-term community engagement and explore questions about social justice, power, and solidarity.

#### **Requirements for the Certificate in Community Development (18.00 Credits)**

SOCI 101 The Sociological Perspective	
OR	
SOCI 120 Global Social Problems	
OR	
SOCI 160/ ENVA 140 Environment & Society	
OR	
POSC 130 Political Theory	3 cr.
SOCI 321 Rural Sociology	3 cr.
GLST 100 Introduction to Globalization Studies	3 cr.
COMD 200 Higher Ed Partnerships for Community Development	
OR	
COMD 210 Community Based Research	
OR	
PCST 250 Empowerment, Social Action and Personal Transformation	3 cr.

Students must earn 6 credits from the following three courses. Each course is offered for between 1 and 3 credits.

COMD 300 Academic Service Learning/Community-Based Research Practicum  
 COMD 400 Community Development Capstone I

COMD 410 Community Development Capstone II 6 cr.

COMD 280 Urban Community Development Internship 1 course

COMD 285 International Community Development Internship 1 course

COMD 200 and COMD 285 are internship courses required of the certificate, but any credits earned will not count toward the 18 credits required of the certificate.

Note: COMD 280 and COMD 285 can be taken for credit. These credits cannot be used toward the Certificate.

### Description of Courses

COMD—200 Higher Ed Partnerships for Community Development 3 credits

This class critically examines community organizing and development and the role of institutions of higher education in this process. It examines responses to following three questions: What are the elements of effective community organizing? What is the role of the university in creating/supporting community change? and finally, how does one go about creating and maintaining effective university-community partnerships? Students will leave this class ready to engage in a disciplinary-based community change project with a Siena faculty member and a Siena College community partner. (ATTR: ARTS, CFJ)

COMD —210 Community Based Research 3 credits

This course investigates the concepts of community, social justice, change and development. Students in this class will study those ideas and implement them with a community partner. Employing *Community Based Research (CBR)*, students will conduct research and develop a collaborative and progressive social research project. (ATTR: ARTS)

COMD— 300 Academic Service Learning/Community-Based Research Practicum 1 – 3 credits

This course awards academic credit to eligible students for the community engaged work with a faculty member at Siena. The number of credits awarded will be determined in advance by the Office of Academic Community Engagement on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in regular ASL Fellow TA seminar meetings will determine the final grade. Prerequisites: PCST 250, COMD 200 or COMD 210. (ATTR: ARTS)

COMD— 400 Community Development Capstone I 1 – 3 credits

Study or research of an advanced topic of the student's choice in an area related to community engaged scholarship. Supervised by a faculty member with the student's thesis committee (which will contain one member from the Academic Community Engagement Office). Where applicable, other Capstone/Theses such as HNRS400 projects may be substituted. Prerequisites: PCST 250, COMD 200 or COMD 210 or Permission of ACE Director. (ATTR: ARTS)

COMD— 410 Community Development Capstone II 1 - 3 credits

A continuation of Community Development Capstone I. Prerequisite: COMD 400. (ATTR: ARTS)

COMD— 280 Urban Community Development Internship 0 – 6 Credits

A long-term, intensive service project with a DEEP Siena partner in the Capital Region. Prerequisites: Permission of ACE Director. (ATTR: ARTS)

COMD— 285 International Community Development Internship 0 – 6 credits

An internship in which students spend a minimum of 5 consecutive weeks working with a community-based organization outside the U.S. Prerequisites: Permission of ACE Director. (ATTR: ARTS)

### Actuarial Science Major

John C. O'Neill, Ph.D., Director

Actuarial Science is an interdisciplinary course of study combining theory and application from both the natural and social sciences. This course of study integrates the theoretical quantitative skills learned primarily in mathematics and applied mathematics with the traditional business disciplines of economics and finance. It is designed for industrious students who have a real interest in learning rigorous mathematics and wish to apply mathematical concepts to help make practical business decisions.

A student who chooses to major in actuarial science will develop (1) a strong mathematical background stemmed in current treatment of classical mathematics, (2) a firm understanding of applied mathematics via

statistical analysis, (3) a practical sense of how these mathematics are used in business to solve problems, (4) a fundamental knowledge of economic theory and (5) an understanding of finance theory and the role of finance within the firm.

A major in Actuarial Science will prepare a student for a career in areas such as pension plan design, health benefit systems analysis and asset management as well as the more traditional roles associated with the insurance industry. Moreover, completion of the Actuarial Science degree at Siena College will satisfy the Validation for Educational Experience outlined by the Society of Actuaries and Casualty Actuary Society. The course of study should also prepare students with the scholarly background necessary to pass Exam 1/P offered by the aforementioned societies. All students pursuing the degree should work closely with the Actuarial Science Director to choose curricula appropriate to their post-graduate plans.

**Requirements for the Major, B.S. in Actuarial Science (35.000 credits):**

CSIS 110 - Introduction to Computer Science	3 cr.
ECON 430 - Econometrics	3 cr.
FINC 301 - Managerial Finance I	3 cr.
FINC 315 - Adv Investments: Theory and Practice	3 cr.
FINC 421 - Business Financial Forecasting	3 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 371 - Probability for Statistics	3 cr.
MATH 470 - Mathematical Statistics	3 cr.

Students must also complete one of the following pairs of courses:

ACCT 200 - Financial Accounting	3 cr.
ACCT 205 - Managerial Accounting	3 cr.
<b>OR</b>	
MATH 230 - Linear Algebra	3 cr.
MATH 320 - Mathematical Analysis	3 cr.

**Auxiliary (10.000 credits)**

ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
MATH 110 - Calculus I	4 cr.

A minimum grade of B- is required in all courses in order to count towards the Actuarial Science major.

**Cognitive Science Minor**

Joshua Alexander, Ph.D., Director

Cognitive science explores the nature of cognitive processes, drawing on research methods from philosophy, psychology, and computer science. The goal of cognitive science is to understand how the mind works, including the representational structures and cognitive processes that underwrite our cognitive capacities, the acquisition and development of these capacities, and the implementation of cognitive structures and processes in both biological and artificial hardware. Working to understand the nature of cognition is one of the most ambitious and exciting projects of our time, and the Cognitive Science Minor positions students to work at the forefront of this movement, preparing them for a variety of graduate programs (e.g., programs in cognitive science, computer science, neuroscience, philosophy, and psychology) and a wide range of industry research positions (e.g., software and hardware design, trial consultation, and education, as well as advertising and marketing). The Cognitive Science Minor allows students to develop a program of study that can focus on a wide range of issues (e.g., the limits of artificial intelligence, the philosophy of mind, the nature of visual perception, the role of emotion in moral decision-making, the "hard problem" of consciousness, etc.) using a wide range of methods (e.g., empirical studies of the ontogenetic and phylogenetic development of cognitive abilities, experimental work on the cognitive processes of adults, neuroscientific studies of the neural bases of cognition, computational and robotic research on simulated cognition, and philosophical work on the nature of the mind).

**Requirements for the Minor in Cognitive Science (18.00 credits):**

COGS 200 Introduction to Cognitive Science	3 cr.
COGS 400 Cognitive Science Capstone Seminar	3 cr.

Students who are majoring in Philosophy, Psychology or Computer Science are required to complete an additional 12 credits consisting of four approved courses from at least two of the following groups outside of their academic major:

Students who are majoring in other areas must take at least one course from each of the following groups plus an additional course for a total of 18 credits.

Group A) Philosophy:

PHIL 155 - Logic  
PHIL 300 - Philosophy and Knowledge  
PHIL 333 - Special Topics – when appropriate  
PHIL 400 - Philosophy of Language and Mind  
PHIL 450 - Great Figures – when appropriate  
PHIL 490 – Seminar – when appropriate  
PHIL 491 – Symposium – when appropriate

Group B) Psychology:

PSYC 240 - Learning  
PSYC 245 - Human Motivation  
PSYC 340 - Human Cognition  
PSYC 350 - Physiological Psychology  
PSYC 355 - Sensation and Perception  
PSYC 285 - Topics in Psychology – when appropriate  
PSYC 490 – Seminar – when appropriate

Group C) Computer Science:

CSIS 110 - Introduction to Computer Science  
CSIS 120 - Introduction to Programming  
CSIS 210 - Data Structures  
CSIS 220 - Assembly Language and Computer Architecture  
CSIS 251 - Discrete Structures 1  
CSIS 351 - Discrete Structures II  
CSIS 375 - Introduction to Artificial Intelligence  
CSIS 200 - Topics in Computer Science – when appropriate  
CSIS 201 - Topics in Computer Science with Laboratory – when appropriate  
CSIS 400 - Advanced Topics in Computer Science – when appropriate  
CSIS 401 - Advanced Topics in Computer Science with Laboratory– when appropriate 12 cr.

One of the co-directors of the Cognitive Science Program must approve the particular selection of courses in order to assure overall coherence and breadth.

### Description of Courses

COGS — 200. Introduction to Cognitive Science 3 credits

This course will introduce students to the basic concepts and methods associated with the interdisciplinary study of cognition, focusing on research from philosophy, psychology, and computer science. We will focus on representation and computation, learning and problem solving, and the nature of mind, perception, intention, emotion, and consciousness, as well as attempts to model human cognition. Students should come away from the course with a better understanding of the nature of the mind, human cognition, and artificial intelligence. Prerequisites: PHIL 101 or PHIL 103 or PSYC 100 or CSIS 110. (ATTR: COGS, ARTS)

COGS — 400. Cognitive Science Capstone Seminar 3 credits

This course is intended for students who have completed or nearly completed their cognitive science coursework. Students will apply previously acquired analytic, computational, mathematical, and experimental skills to independent research projects. Class time will be devoted to descriptions of innovative and useful research methods, discussions of recent developments in cognitive science, and student presentations of their

research projects. Topics may include representation and computation, learning and problem solving, and the nature of mind, perception, intention, emotion, and consciousness, as well as attempts to model human cognition. The principle obligations of the seminar participants are to lead two class discussions, to actively participate in all classes, and to conduct a full-scale research project and to present the results from this research project near the end of the semester. Prerequisites : COGS 200 (ATTR: COGS, ARTS)

### **Computational Science Major and Minor**

Dr. Graziano Vernizzi, Director

“Computational Science” is a relatively new interdisciplinary field that has emerged as a new and distinct discipline. It is a highly functional mixture of applied mathematics, computer science, and the sciences. The goal of such a program is to teach a student to perform science computationally. A scientist trained in computational science will bring computing skills to the solution of scientific problems—an approach traditional majors do not offer. Graduates of the program will be prepared for employment in research laboratories, business, and academia, and for further study in computational science and related disciplines.

Computational Science is the study of scientific problem solving using computers. It covers the formulation and analysis of problems, the use of software packages and programs to solve these problems computationally, simulations and modeling, mathematical and numerical analysis, visualization, and programming. A student emerging from such a program will have strong problem-solving skills with a multidisciplinary approach. Such skills make the computational scientist highly sought after.

Students may elect to major or minor in Computational Science. Courses for the Computational Science program at Siena are distributed among three departments: computer science, mathematics, and physics. For the major, seven courses are required in each of the three participating departments, plus a capstone course that may be elected in any one of the three departments. For the minor, three courses are required in each department.

A student planning to major in Computational Science should consult each semester with the Computational Science program director. Not every course is offered every year, so care must be taken in scheduling to assure completion of the major.

**Requirements for the Major, B.S. in Computational Science (73.000 credits):**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	3 cr.
CSIS 210 - Data Structures	3 cr.
CSIS 310 - Numerical Methods	3 cr.
CSIS 385 - Analysis of Algorithms	3 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 230 - Linear Algebra	3 cr.
MATH 240 - Intro to Computer Algebra	3 cr.
MATH 250 - Discrete Structures I	3 cr.
MATH 380 - Differential Equations	3 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 222 - Modern Physics	3 cr.
PHYS 250 - Computational Physics	3 cr.
PHYS 310 - Mechanics I	4 cr.
PHYS 350 - Simulation and Modeling	3 cr.
SCDV 230 - Electronics	4 cr.

Student may choose two courses from the following: 6 cr.

CSIS 225 - Object-Oriented Des and Prog

CSIS 380 - Computer Graphics

CSIS 400 - Adv Topics in Computer Science

Student may choose one course from the following: 3 cr.

CSIS 499 - Independent Study in Computer Science      **OR**  
 MATH 499 - Independent Study in Math                      **OR**  
 PHYS 470 - Advanced Laboratory I                              **OR**  
 SCDV 480 - Internship in Science

**Requirements for the Minor, Computational Science (31.000 credits):**

Students majoring in Computer Science, or Mathematics, or Physics, can minor in Computational Science by taking 6 out of the following 9 courses that are not from the Department of their major.

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	3 cr.
CSIS 310 - Numerical Methods	3 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 240 - Intro to Computer Algebra	3 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 250 - Computational Physics	3 cr.

**Criminal Justice Minor**

The interdisciplinary Criminal Justice minor is the result of an increasing level of interest among students and faculty. Historically, this minor emerged as a result of the Sociology Department's desire to create another avenue of opportunity for students interested in issues associated with the criminal justice field. The cross-fertilization of knowledge associated with the interdisciplinary focus offers students a unique perspective generally not found in more traditional programs of criminal justice. Available coursework for the minor is currently located in Departments of Sociology, Political Science, Psychology, Philosophy and Social Work as well as the Peace Studies Program.

**Requirements for the Minor, Criminal Justice (18.000 credits):**

SOCI 190- Crime and Justice	3 cr.
*POSC 374 - Intro to Criminal Law	<b>OR</b>
*POSC 376 - The 4th, 5th, 6th Amendments	3 cr.
SOCI 260 - Deviance	<b>OR</b>
SOCI 310 - Theories of Criminality	3 cr.
Any three of the following courses:	9 cr.
PCST 240 - Topics in Peace Studies (w/JMN attribute)	
PHIL 270 - Philosophy of Law	
PSYC 220 - Abnormal Psychology	
PSYC 375 - Forensic Psychology	
SOCI 385 - Topic in Sociology (w/JMN attribute)	

Only one of the two following courses can be taken for credit in the minor:

PSYC 345 - Drugs and Human Behavior  
 SWRK 452 - Soc Work Prac: Drugs and Alcohol

\*POSC 374 is offered every other Fall  
 \*POSC 376 is offered every other Spring

**First Year Seminar**

The First Year Seminar is a two semester, writing intensive course taken sequentially by first year students. The goal of the Seminar is to prepare our freshmen for the intellectual life of college: how to read critically, how to engage with a text, how to articulate an informed position on big questions, how to write clearly and persuasively, how to voice an opinion in a classroom conversation, how to make connections between and among the readings they are doing, the subjects they are studying, as well as between Siena and the outside world. The First Year Seminar will teach our freshmen how to be students and will do this in a way that introduces them to the story that is unique to Siena and our Franciscan heritage. First and foremost, this course is academically rigorous and is a symbol of academic excellence.

FYSM 100. First Year Seminar I (3 credits) and FYSM 101. First Year Seminar II (3 credits)

Themes for the first semester are: Heritage and Natural World; themes for the second semester are: Diversity and Social Justice. Within each theme, there are a few interdisciplinary readings common to all sections of the course. Individual faculty choose the remaining readings and an overall theme to bring coherence to their sections. The lives and stories of St. Francis and St. Clare are interwoven throughout the year. Under most circumstances, students will remain with the same faculty member and classmates for both semesters.

### **Franciscan Service and Advocacy Minor**

This minor provides students with academic and field experiences that focus on working with the poor and marginalized in society. Students of any major are able to select this minor. Through this minor, students will:

1. Receive some formal orientation to the experience.
2. Receive education, prior to and following the experience, directed at a better understanding of:
  - a. The socio-economic factors and structures which negatively impact these groups,
  - b. The basic principles of Catholic Social Teaching, and
  - c. The realization that charity (direct service) is the most basic and minimal, not the most adequate, response to the needs of the poor.
3. Be encouraged to become advocates of the poor and the marginalized after completing their education.

Students intending to pursue a minor in Franciscan Service and Advocacy should declare their intention to the Director of the Franciscan Center for Service and Advocacy and the Dean of their school (Liberal Arts, Business, Science).

### **Requirements for the Minor in Franciscan Service & Advocacy (18 Credits)**

RELG—401 Franciscan Tradition or RELG 265	3 cr.
INSA—400 Seminar in Franciscan Service and Advocacy	1 cr.
INSA—480 Internship in Franciscan Service and Advocacy	2 cr.
Franciscan Service and Advocacy Electives (FSA) (No more than 6 credits in any one department)	12 cr.

#### Franciscan Service and Advocacy Electives

ATDV 200	Interdisciplinary Studies: Human Power
BUDV 305	Business Ethics
EDUC 210	Issues in Contemporary American Education*
EDUC 261	Foundation of Language and Literacy*
ENVA 120	Introduction to Environmental Ethics
ENGL 285	Topics in English: Literature of Peace and Justice
PCST 101	Introduction to Peace Studies
PCST 240	Topics in Peace Studies Economics of Poverty (cross-listed ECON—490) Children in War and Work (cross-listed POSC—359)
PCST 250	Empowerment, Social Action and Personal Transformation
PHIL 210	Ethics
POSC 265	Public Policy
POSC 360	Environmental Politics
POSC 310	Interest Group Politics
POSC 485	Internship in Legislative Process
POSC 489	Internship in Public Service Studies
PSYC 120	Psychology of Women
PSYC 260	Social Psychology
RELG 265	Introduction to Catholic Social Teaching
RELG 270	Religion and the Environment
RELG 300	Topics in Religious Studies (when topic is appropriate)
RELG 360	Morals and Medicine

RELG 401 Franciscan Tradition (if not used as required course)  
RELG 445 Liberation Theology  
SOC 101 The Sociological Perspective  
SOC 120 Current Social Problems in America  
SOC 210 Race and Ethnic Relations  
SOC 220 Collective Behavior and Social Movements  
SOC 240 Sociology of Aging  
SOC 260 Deviant Behavior  
SOC 350 Social Stratification and Mobility  
SOC 375 Comparative Health Care Systems  
SWRK 100 Introduction to Social Welfare and Social Work  
SWRK 466 Topics in Social Work

### **Description of Courses**

INSA—400. Seminar in Franciscan Service and Advocacy 1 credit

A course to prepare students for INSA—480 Internship in Franciscan Service and Advocacy. The theological and social principles that provide the foundation for service and advocacy among the poor and marginalized will be discussed, particularly as they are expressed in the Franciscan Tradition, but also as they are understood by other religious traditions. INSA—400 may be counted as elective RELG credit by Religious Studies majors and minors. (ATTR: ARTS)

INSA—480. Internship in Franciscan Service and Advocacy 1, 2, or 3 credits

Field Study in service and advocacy among the poor and marginalized in the local community (i.e. Capital Region). Students will be expected to work in the field for 40 hours for each credit earned. Students will be required to keep a journal/log of their activities, to attend scheduled classroom seminars and to prepare a final report – a paper or a presentation on a project. Students may receive a maximum of 6 credit hours in internship courses, college-wide. Students will work with the Coordinator of the Internship in Franciscan Service and Advocacy to select an appropriate site and to determine the suitable form of the final report. Pass/Fail credit will be given. INSA—480 may be counted as elective RELG credit by Religious Studies majors and minors. (ATTR: ARTS)

Prerequisites:

1. INSA—400 or other courses as determined by the Coordinator of the Internship in Franciscan Service and Advocacy, and
  2. Permission of the Coordinator of the Internship in Franciscan Service and Advocacy
- Ordinarily, INSA—400 and 480 are taken concurrently in the same semester.

For more information, contact the Director of the Center for Franciscan Service and Advocacy.

### **Globalization Studies Minor**

Dr. Jean M. Stern, Director

The Globalization minor complements all majors and prepares students to “address the challenges of an ever-changing world and a diverse society” (Siena College Mission Statement). Students will examine how their decisions and those of other U.S. citizens affect and are being affected by decisions beyond our borders. They will also see that most careers whether in business, social policy/action, and the humanities, are pursued within a global context.

This minor is premised on the definition of globalization as the “growth of relations among people across national borders that creates a complex series of connections that tie together what people do, what they experience, and how they live across the globe.” It also incorporates Siena College’s Franciscan heritage by recognizing that St. Francis and his followers developed networks beyond Italy’s borders and that our contemporary connections must be evaluated in terms of both how they affect human society and all of Creation and how they involve our responsibility to others.

Hence, this minor attempts to enable students to discover their connections and responsibilities to the rest of the world through considering these basic questions in all its designated courses:

1. What are the positive and negative ways in which the people of the world are connected in the twenty-first century?
2. How do I and the people in my community, region and country have global connections with people in other lands?

3. How do individuals, organizations and governments attempt to manage these connections? What are the positive and negative implications for the various management methods and rules? Who benefits and who loses from these decisions? How do these decisions affect the marginalized and the poor?

**Requirements for the Minor, Globalization Studies (18.000 credits):**

GLST 100 - Intro to Globalization Studies	3 cr.
GLST 490 - International Experience Seminar	3 cr.
Electives	12 cr.

Students should consult with the Director of Globalization Studies as soon as possible (preferably during their first year), in order to discuss the minor's requirements.

Students must take part in a Study Abroad Experience. Once a student has chosen a Study Abroad program, he/she should consult with the Director regarding the applicability of the courses for GLST electives.

Students must demonstrate competency at the Intermediate level in a foreign language.

**Description of Courses**

GLST—100. Introduction to Globalization Studies 3 credits

This course introduces students to the examination of ways that people of the world, including themselves, are interconnected across national borders and to evaluate the positive and negative implications of the methods for managing that interconnectedness. Prerequisites: None. (ATTR: ARTS, GLST, CFD)

GLST—300. Topics in Globalization Studies 3 credits

This course will explore topics in Globalization Studies that are not part of the regular course offerings. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with different content. Prerequisites: None. (ATTR: ARTS, BUS, GLST)

GLST—325. Globalization Travel Course 3 credits

As an academic course that includes a required travel component, the class offers three semester hours credit for coursework that includes an intensive travel-study program in selected geographical areas. The travel experience enhances the study of the impact of globalization on peoples worldwide. Lectures, supervised research into aspects of the course, and orientation meetings will prepare students for an informed experience. This course may be taken more than once with different content. Permission of instructor required. Travel cost paid by student. Cost varies each semester. (ATTR: ARTS, BUS, GLST)

GLST—490. International Experience Seminar 3 credits

This course helps students evaluate and integrate their international experience and globalization studies courses. Prerequisites: Permission of the Globalization Studies Director. Students must have completed their study abroad/international internship and their language requirement before taking this course. (ATTR: ARTS, GLST)

Course	Attribute	Title
BUDV 201	GLST	Global Business Environment
BUDV 420	GLST	Global Connection
CREA-231	GLST	Art to the 15 <sup>th</sup> Century
ECON 350	GLST	Comparative Economics
ECON 360	GLST	Economic Development
FINC 413	GLST	International Finance
FREN 027	GLST	French Cinema
FREN 330	GLST	French Civilization
FREN 340	GLST	Civilization of Québec
GERM 025	GLST	Twentieth Century Germanic Literature in Translation
GERM 026	GLST	Twentieth Century German Cinema
GERM 027	GLST	U.S. and German Media
GLST 300	GLST	Topics in Globalization Studies

GLST 325	GLST	Globalization Travel Courses
HIST 202	GLST	West and the World II
HIST 303	GLST	America and the World I
HIST 305	GLST	America and the World II
HIST 333	GLST	The Middle East in Modern Times
HIST 353	GLST	History of East Asia II
HIST 373	GLST	Africa II: The Modern Transition
HIST 457	GLST	American Immigration Historical Perspective
MGMT 334	GLST	International Management
MRKT 334	GLST	International Marketing
POSC 150	GLST	World Politics
POSC 250	GLST	United Nations
POSC 254	GLST	Children in War and Work
POSC 257	GLST	Terrorism: Causes and Cures
POSC 346	GLST	Middle East Politics
POSC 355	GLST	Global Environmental Dilemmas
POSC 357	GLST	International Negotiation
POSC 362	GLST	Refugee and Migration Studies
POSC 378	GLST	International Law
RELG 210	GLST	Islam
RELG 280	GLST	World Religions
RELG 357	GLST	Global Catholicisms
RELG 385	GLST	Buddhist Traditions
RELG 390	GLST	Religion and globalization
SOCI 140	GLST	Cultural Anthropology
SOCI 160	GLST	Environment and Society
SOCI 240	GLST	Growing Older in a Global Environment
SOCI 370	GLST	Health and Illness
SOCI 376	GLST	Health Care in the Developed World
SOCI 380	GLST	Population Problems
SPAN 027	GLST	Women Writers from Latin American: Literature in Translation
SPAN 350	GLST	Spanish Civilization
SPAN 360	GLST	Spanish American Civilization

### **Health Care Minors**

The minors in Health Studies and Health Services Administration are offered as a result of diverse interests in the health care industry today. This program provides students, regardless of major, with a cohesive core of courses that focus on significant aspects of health care issues in American society. These courses are not meant to serve as a major, but rather as an area of knowledge within the broader framework of health. As students decide upon careers, such knowledge is beneficial. The program can assist students if they decide upon a career path within some aspect of the broad field of health. Such career paths include, but are not limited to, work in medicine, nursing, public health, hospital administration, epidemiology, insurance, health research, marketing, health finance, health policy and management, medical sociology, and medical social work. Many of these paths require advanced degrees. However, the minors also benefit students who have decided upon career paths that do not include an advanced degree by making them a more marketable candidate to the work world.

\*BIOL 110 does not count towards the Health Care Minor for Biology Majors

**Minor in Health Studies (18.000 credits)**

SOCI 375 - Health Care in the Developed World 3 cr.

Students must take 4 courses with HSMR attribute from: 12 cr.

SOCI 240 – Growing Older in a Global Environment

SOCI 370 - Health and Illness

SOCI 490 - Seminar in Sociology (When Appropriate)

PSYC 225 - Health Psychology

PSYC 345 - Drugs and Human Behavior

POSC 260 - Public Administration

POSC 265 - Public Policy

PHIL 210 - Ethics

SWRK 452 - Social Work Prac: Drugs and Alcohol

SWRK 453 - Social Work Pr: Grief Death Dying Pr

RELG 360 - Morals and Medicine

ECON 325 - Health Economics

Student must successfully complete one of the following: 3 OR 4 cr.

BIOL 020 - Topics in Human Biology

BIOL 110 - General Biology I

BIOL 130 - Gen Biology IA for Social Science

**Requirements for the Minor, Health Services Administration (18.000 credits):**

SOCI 375 - Health Care in the Developed World 3 cr.

Student must successfully complete one of the following: 3 OR 4 cr.

BIOL 020 - Topics in Human Biology

BIOL 110 - General Biology I

BIOL 130 - Gen Biology IA for Social Science

PHIL 210 - Ethics **OR**  
RELG 360 - Morals and Medicine 3 cr.

FINC 341 - Life and Health Insurance **OR**  
MGMT 332 - Human Resources Management 3 cr.

Student must successfully complete two of the following: 6 cr.

POSC 265 - Public Policy

FINC 422 - Public Finance

BLAW 200 - Legal Environment of Business

Students interested in the Health Studies Minor should contact Dr. Duane A. Matcha (Rosetti Hall 325), call (518) 783-2944 or email [matcha@siena.edu](mailto:matcha@siena.edu). Students interested in the Health Services Administration Minor should contact Assistant Dean of Business (Siena Hall 301) or call (518) 783-2321.

**J. Spencer and Patricia Standish Honors Program**

Dr. Lois K. Daly, Director

The College-wide Honors Program fosters the intellectual growth of Siena students through increased opportunities for independent thought and research. In particular, students who enter the program, the Honors Fellows, are challenged through a combination of Honors courses and a culminating Honors Thesis/Project to develop an academic experience best suited to their needs and interests. Honors work requires students to take the lead in developing their own intellectual curiosity and abilities. Limited to 15 students, Honors courses demand that students take more responsibility for their education. Extensive contact with the faculty and other Honors Fellows both inside and outside the classroom enhance the possibilities for academic and personal growth.

One of the hallmarks of the Honors Program is a wide range of academic opportunities. Departments throughout the College offer Honors courses. Many of these fulfill core, major, certificate, or minor requirements. Moreover, students can major in one subject and write an Honors Thesis/Project in another discipline or combination of disciplines in which they have taken four or more courses.

There are multiple points of entry into the Honors Program. After careful review of the students' college admissions applications, incoming first-year students are invited to become Honors Fellows by the Honors Program Director. Students already enrolled at Siena may apply if they have completed 30 credit hours with an overall average of 3.3. Highly qualified students who are not enrolled in the Honors Program, but who have at least 12 credit hours and a 3.5 GPA in a field of study, may apply to the Honors Committee to do the research component only, starting with the Honors Research Colloquium.

Honors Fellows often participate in Study Abroad, the Education Certification program and in internship opportunities. As with any combination of major, program, and experiential learning, careful planning is necessary. The earlier the student identifies the desired opportunities, the easier it is to work toward them. Honors Fellows must maintain a 3.3 GPA throughout their studies at Siena College.

#### Requirements

A. Academic Requirements: 24 credit hours over four years

Honors courses- 15 credit hours (may also satisfy core requirements)

Research component- 9 credit hours consisting of  
3 hrs. Honors Research Colloquium

6 hrs. Honors Thesis/Project

B. Service Requirements: Prior to graduation, students must meet a service requirement. This may be accomplished by completion of specified courses with a service component or by completion of an individual contract detailing the kind of service and its relationship to learning.

#### Description of Courses

HNRS—300. Honors Program Service 0 credits

Each student participating in the Siena Honors Program must complete a service/learning component that is approved by the Honors Director. This requirement may be fulfilled through a specific course or by individual contract. Courses that fulfill this requirement include PCST-480, INSA-400/INSA-480 (total 3 credits), and SWRK-301. The individual contracts must be approved by the Honors Director. The service must be equivalent in time and effort to the courses used for this component. Permission of the Honors Program Director required.

HNRS—350. Honors Research Colloquium 1-3 credits

The Research Colloquium is designed to prepare Honors students to write an Honors Thesis. It provides a forum for students to learn advanced research skills in their respective disciplines, to discuss ideas about a Research Thesis/Project as they evolve, and to discuss the process of planning and preparing that thesis/project. Students will use class time to try out their ideas and to receive constructive criticism; to conduct appropriate literature searches in the discipline(s) in which their thesis falls; and, at the end of the semester, to present final proposals for the thesis/project. In addition, by the end of the course, the students will have a clear and doable topic in hand and a faculty mentor chosen to supervise the work. No final exam. Offered on a pass-fail basis. Prerequisite: completion of at least four honors courses. Permission of the Honors Program Director required. Offered only in the spring semester.

HNRS—400. Honors Thesis I 1-5 credits

Study or research on an advanced topic of the student's choice, supervised by a faculty mentor in consultation with the student's thesis committee. No final exam. Prerequisite: HNRS-350. Permission of the Honors Program Director required.

HNRS—410. Honors Thesis II 1-5 credits

A continuation of Honors Thesis I. No final exam. Prerequisite: HNRS-400, Honors Thesis I (may be taken concurrently). Permission of the Honors Program Director required.

#### International Studies

##### Foreign Languages and Business Certificate Program

Carolyn F. Malloy, Ph.D., Director

This certificate program, open to all students, responds to the need for understanding the international and interdependent dimensions of business in the modern world. It also provides preparation for careers in international business and for graduate programs in areas with an international focus.

The goals of this program are: to aid students in their understanding of the international and interdependent character of the contemporary world; to enable students to deepen their awareness of the international

dimensions of American business; to prepare students for careers in international business by providing them with language competency and knowledge of international affairs; to provide knowledge and training in international business within the context of a liberal, humanistic, and ethical tradition.

Admission to the program requires permission of the director. Students interested in the program are advised to meet with the director by the first semester of their sophomore year.

**Requirements for the International Studies Certificate (42.000 credits):**

1. Language Competency

Two courses beyond the intermediate level, or the equivalent background. 6 cr.

2. Foundational Courses

RELG 365 - Religion, Values, and Business	<b>OR</b>	
PHIL 210 - Ethics	<b>OR</b>	
BUDV 305 - Business Ethics	<b>OR</b>	
ENVA 120 - Environmental Ethics		3 cr.

ACCT 200 - Financial Accounting	3 cr.
ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.

Two of the following: 6 cr.

FINC 212 - Money and Banking	
FINC 301 - Managerial Finance I	
FINC 302 - Managerial Finance II	
MGMT 211 - Management Principles	
MRKT 212 - Marketing	

3. International Focus Courses

Student must complete 9-12 hours of humanities and/or social science courses dealing specifically with international issues. 9-12 cr.

Student must complete 3-6 hours of courses in international business. 3-6 cr.

Student must successfully complete an International Internship:

ATDV 781 - International Internship, Arts	
BUDV 781 - International Internship, Bus	3 cr.

**Latin American and Caribbean Studies Certificate**

The Certificate in Latin American and Caribbean Studies permits students of any major to pursue concentrated and multidisciplinary study of Latin America and the Caribbean. The certificate promotes intellectual discussion, research, and teaching about Latin America and the Caribbean with a focus on its people, languages, culture, history, politics and society. Rooted in the identity of Franciscanism, the interdisciplinary course of study will develop critical and creative thinking that emphasizes appreciation of cultural diversity as well as promoting a better understanding of the complex relationship between the nations of our hemisphere. The certificate is a complement to students interested in Marketing, Management, Economics, Finance and investments, public affairs, Spanish, English, French, Sociology, History, and Political Science.

**Requirements for the Certificate, Latin American and Caribbean Studies (18.000 credits):**

HIST 340 Latin America: Colonial Period	
<b>OR</b>	
HIST 343 Latin America: National Period	3 cr.
1 LACS course from "Historical Process" (LAHP)	3 cr.

1 LACS course from "Language and the Arts" (LALA) 3 cr.  
1 LACS course from "Modern Socio-Cultural and Scientific Experience" (LASS) 3 cr.  
2 additional LACS elective courses 6 cr.

**Language Requirement:** Students must successfully complete SPAN 202 or French 202, or complete the equivalent of four semesters of college/university language study in the target language.

The language requirement may be achieved by course work at Siena or another institution, study abroad, or testing through the Modern Languages and Classics Department at Siena.

Each student must either complete appropriate Study Abroad experience or an internship. Study Abroad is highly recommended.

Arrangements for Study Abroad are made through the International Programs and Study Abroad Office in consultation with the director of the certificate. These courses must be approved by the Assistant Dean for Student Services.

No more than 6 hours of approved independent study may apply to the 18 hour requirement.

No more than 9 hours can be taken in the same department.

HIST 340 and HIST 343 must be taken at Siena College

## **Courses**

### **Historical Process**

HIST 340 Latin America, Colonial Period (foundational choice)  
HIST 343 Latin America, National Period (foundational choice)  
HIST 345 Mexico  
HIST 411 Spanish Borderlands  
HIST 465 Slavery in Historical Perspective  
HIST 480 Internship in History (when appropriate)  
HIST 495 Independent Study (when appropriate)  
HIST 499 Capstone (when the topic is appropriate)  
HIST 390 History Honors (when the topic is appropriate)  
HIST 490 History Honors (when the topic is appropriate)

### **Language and the Arts**

FREN 380 The Short Story  
FREN 495 Independent Study in French (when appropriate)  
SPAN 027 Women Writers from Latin America in Translation  
SPAN 301 Communication in Spanish I  
SPAN 302 Communication in Spanish II  
SPAN 310 Spanish Language Study Tour (when appropriate)  
SPAN 320 Introduction to Hispanic Prose  
SPAN 330 Introduction to Hispanic Drama  
SPAN 360 Spanish American Civilization  
SPAN 400 Topics in Spanish (when appropriate)  
SPAN 460 Representative Latin American Authors  
SPAN 495 Independent Study (when appropriate)  
ENGL 376 Latino/a Literature  
ENGL 499 Independent Study (when appropriate)

### **Modern Socio-Cultural and Scientific Experience**

CREA 297 Special Topics in Creative Arts (when appropriate)  
CREA 497 Independent Study in Creative Arts (when appropriate)  
POSC 347 Politics and Society in the Americas  
POSC 359 Special Studies in World Politics (when appropriate)  
POSC 450 Political Science Travel Course (when appropriate)  
POSC 490 Political Science Honors (when appropriate)  
POSC 499 Independent Study (when appropriate)

PHIL 499 Independent Study (when appropriate)  
 RELG 357 Global Catholicism  
 RELG 445 Liberation Theology  
 RELG 499 Independent Study (when appropriate)  
 SOCI 499 Independent Study (when appropriate)  
 ATDV 779 Topics in Intercultural Understanding, Arts (when topic on Latin America or the Caribbean)  
 BUDV 779 Topics in Intercultural Understanding, Business (when topic on Latin America or the Caribbean)  
 BUDV420 Global Connections (when topic on Latin America or the Caribbean)  
 BIOL 235 Tropical Biology (has Biology prereqs)  
 BIOL 245 Tropical Marine Ecology (has Biology prereqs)

### **Medieval and Renaissance Studies Minor**

Karen Sonnelitter, Ph.D., Director

The Minor in Medieval and Renaissance Studies is a part of Convivium, Siena's Center for Medieval and Renaissance Studies. The name "Convivium" refers to a feast: a "banquet of the mind." In a pragmatic and practical world, it reminds us that learning at its best is not only functional, but is filled with joy, wonder, and discovery. Convivium offers students the opportunity to do individual research and to take courses with faculty who are nationally active in medieval and Renaissance studies across a variety of disciplines.

Convivium also fosters a regional community of teacher-scholars, sponsors conference presentations, and enriches Siena's library. The Convivium Collection consists of medieval and Renaissance manuscript leaves, early printed editions, facsimiles, and rare books for teaching and research.

The Minor in Medieval and Renaissance Studies is an interdisciplinary program designed to provide students with a full immersion in the civilization of Europe and its surrounding areas, roughly from 500 to 1800. Students in this field will integrate perspectives from different disciplines in order to understand the totality of medieval culture.

#### **Requirements for the Minor, Medieval and Renaissance Studies (18.000 credits):**

MRST 400	3 cr.
Courses with MRST attribute	15 cr.

Students must take courses drawn from at least 3 different departments.

No more than one course from the student's major will count toward the minor.

#### **Description of Courses**

MRST—100. Renaissance and Renewal: Introduction to Medieval and Renaissance Studies 3 credits  
 Set between the crumbling of the Roman Empire and the time commonly called the Enlightenment, the Medieval and Renaissance periods encompassed a time of religious diversity, cultural contact, and shifting gender roles. Medieval and Renaissance Studies, a multidisciplinary field, introduces students to the founding traditions of Western Society. This course is an introduction to the nature and methodology of the field; the primary source materials including documents, poetry, music, art, letters, laws, and/or other sources; and the disciplines that comprise medieval and Renaissance studies. (ATTR: ARTS, CAH, MRST)

MRST—400. Senior Project 3 credits

A senior year, interdisciplinary, independent study project, designed in consultation with a Project Advisor and a Reader, and approved by the MRST Program Director. (ATTR: ARTS, MRST)

### **Multicultural Studies Minor**

Dr. Lisa Nevárez Director

Multicultural Studies is an interdisciplinary and comparative program that encompasses scholarship about intercultural relations and constructions of race/ethnicity in social, cultural, historical, political, and economic contexts. The Multicultural Studies minor at Siena introduces students to in-depth analysis of race/ethnicity and culture in the United States and in the nations of origin of peoples of non-European descent. Multicultural Studies courses promote an appreciation of human diversity, and contextualized understanding of the complex history of intercultural relations within the United States and the larger world.

#### **Requirements for the Minor, Multicultural Studies (18.000 credits):**

MULT 400 - Multicultural Studies Seminar	3 cr.
1 Comparative Multicultural course (MCCP)	3 cr.

Students should not take more than 3 courses in one department and should select courses in consultation with the Director of the Program, Dr. Lisa Nevárez who can be reached at lnevarez@siena.edu

### Description of Courses

MULT—300. Topics in Multicultural Studies 3 credits

This course will explore topics in Multicultural Studies that are not part of the regular course offerings. Topics will be announced during registration in the preceding semester. This course may be taken more than once with a different content. (ATTR: ARTS)

MULT—400. Seminar in Multicultural Studies 3 credits

This seminar provides advanced cultural critique and exposure to contemporary innovative, multicultural theory and its applications. Students will challenge the limitations of western scholarship by applying or developing multicultural methodology in a major research project on a non-western topic. The course may also include personal and group interactions with multicultural individuals and community environments. Prerequisite: Students must have completed three courses in Multicultural Studies prior to this course or obtain permission of the instructor. (ATTR: ARTS, MULT)

#### Comparative Multicultural Courses (MCCP)

MULT—180 POSC—140 Comparative Politics

MULT—182 SOCI—140 Cultural Anthropology

MULT—280 SOCI—210 Race and Ethnic Relations

MULT—282 ENGL—285 Growing Up in America

MULT—284 ATDV—210 WSTU—100 Perspectives in Women's and Multicultural Studies

MULT—286 POSC—250 United Nations

MULT—380 RELG—380 Religions of Native Peoples

MULT—382 ENGL—368 Literature of the War in Viet Nam

MULT—384 ECON—360 Economic Development

MULT—386 MRKT—334 International Marketing

MULT—482 RELG—445 Liberation Theology

#### Multicultural Studies Electives

##### African American/Africa Courses

MULT—110 SOCI—180 Peoples of Africa

MULT—210 RELG—210 Introduction to Islam

MULT—212 CREA—297 Special Topics in Creative Arts — World Music/Africa

MULT—310 HIST—370 Africa I

MULT—312 HIST—373 Africa II

MULT—314 SOCI—385 Topics in Sociology — Civil Rights Era

MULT—316 ENGL—370 African American Literature

MULT—410 HIST—461 African American History

MULT—412 HIST—411 Slavery in Historical Perspective

MULT—414 HIST—471 Conflict in South Africa

##### Latino/Latina Latin America Courses

MULT—030 SPAN—027 WSTU—330 Women Writers from Latin America in Translation

MULT—330 HIST—340 Latin America — Colonial Period

MULT—332 HIST—343 Latin America — National Period

MULT—334 HIST—345 History of Mexico

MULT—335 ENGL—376 Latino/a Literature

MULT—336 SPAN—360 Spanish American Civilization

MULT—338 POSC—347 Politics and Society of the Americas

MULT—430 HIST—465 Spanish Border Lands

MULT—432 SPAN—460 Latin American Literature

##### Asian American / Asia Courses

MULT—340 HIST—350 History of East Asia I

MULT—342 HIST—353 History of East Asia II

MULT—344 HIST—355 South East Asia, Mainland

MULT—345 ENGL—374 Asian-American Literature

MULT—446 HIST—357 South East Asia, Archipelago and Islands  
 MULT—348 HIST—360 History of Modern China  
 MULT—350 HIST—363 History of Modern Japan  
 MULT—352 POSC—345 Chinese Government and Politics  
 MULT—354 RELG—385 Buddhist Traditions

**Native American Courses**

MULT—160 SOCI—150 American Indians  
 MULT—360 ENGL—372 Native American Literature

**Arab American/Middle Eastern Courses**

MULT—210 RELG—210 Introduction to Islam  
 MULT—370 HIST—330 The Middle East: Foundations of the Modern Experience  
 MULT—372 HIST—333 The Middle East in Modern Times

**Multimedia Minor**

The multimedia minor prepares students in academic, professional, and practical areas to work in the dynamic field of multimedia and to pursue further studies in multimedia. The minor and an appropriate associated major can allow significant concentration on multimedia in the creative arts, computing, or business. The minor in multimedia requires 18 credits in a coherent variety of courses beyond the ones taken in majors related to the multimedia. The functional skills and knowledge provided in the minor include fundamentals of art, interactive media, multimedia systems design and development, web systems development, visual and audio media production and editing, oral and written communication, working in teams, working with clients, and ethical behavior in the work environment.

Because of the interdisciplinary nature of the program, many Multimedia courses are cross-listed in other departments of the College. The course descriptions, including the years when they are offered and the prerequisites, can be found in the appropriate departmental section of the catalog. It is anticipated that students pursuing a Minor in Multimedia and students who take only selected courses without pursuing the minor will choose the MUMD number. Courses that are counted toward a student’s major may not also be counted toward the minor. The content and requirements of cross-listed courses are not affected by which course number the student selects for registration

**Requirements for the Minor, Multimedia (18.000 credits):**

CREA 112 - Basic Design I		3 cr.
MUMD 190 - Multimedia Development	OR	
CSIS 180 - Web Design		3 cr.
MUMD 490 - Multimedia Team Project		3 cr.

Any three of the following elective courses: 9 cr.

- CSIS 110 - Intro to Computer Science\*
- CSIS 114 - Management Information Systems\*
- CREA 117 - Communications Law and Ethics
- CREA 180 - Experimental Video
- CREA 204 - Digital Photography
- CREA 309 - New Art Forms
- CREA 325 - Graphics
- BUDV 305 - Business Ethics
- BUDV 482 - Internship in Business \*\*
- SCDV 480 - Internship in Science\*\*
- ATDV 480 - Internship in Arts Division\*\*

\*\*Only one course may be completed for credit in the minor.  
 \*\*Only one internship course may be applied to the minor.  
 The internship project must be approved by a multimedia advisor.

MUMD—190. Multimedia Development (2 hours lecture and 2 hours lab) 3 credits

Web Design is a hands-on laboratory based course covering the design and implementation of websites using markup languages, style sheets, and various software tools and applications. Lecture will cover the history and development of the Internet, the World Wide Web, and the core technologies used to implement modern websites. Students will learn about the importance of semantic markup, language standardization, and separation of content and appearance. The course will focus on web interface design using forms, techniques for

integrating a wide range of media formats, and design fundamentals needed in implementing effective, user-friendly websites. (Same as CSIS —180.) Prerequisite: None. Lab fee. Computer use fee.

MUMD—490. Multimedia Team Project 3 credits

Teams of students in the Multimedia Minor program work on semester-long projects. The teams should comprise students from different areas of expertise in multimedia, and they should develop realistic applications similar to those found in the professional workplace. A goal of the course is to help students integrate the knowledge and skills they acquired in previous courses and demonstrate their ability to develop realistic products. Prerequisite: CSIS—110, CREA—112, MUMD—190. Offered each spring semester. Computer use fee.

### Peace Studies Program

“Peace is not merely the absence of war... but... is rightly and appropriately called ‘an enterprise of justice.’” — Isaiah 32:17

(Pastoral Constitution #78 Vatican II)

Peace Studies at Siena is a multi-disciplinary scholarly, practical, and personal pursuit that examines many social justice topics, such as the origins, causes, and justifications of war and other systems of state, group, and interpersonal violence; a just world community; global environmental concerns; intercultural understanding; and non-violent alternatives to injustice, violence and war.

The Siena College Peace Studies program is inspired by Jewish and Christian principles of peace and justice and the values and example of Francis of Assisi, who encouraged humans to be peacemakers not only in their own lives but in the world at large. This vision of peace and justice can be found in many life-affirming religious and philosophical traditions, and has informed the words and actions of many peacemakers, such as Mahatma Gandhi, Martin Luther King, Jr. and Dorothy Day.

The program subscribes to the following general principles articulated by Joseph Fahey in *Education for Justice and Peace*:

1. Peace education must be solidly academic in nature: scholarly research is basic to the program, and students are strongly encouraged to consider as many perspectives as possible, not solely that of peace researchers.
2. Peace studies is multidisciplinary in methods: peace studies is problem-centered and thus requires the perspectives and methodologies of many disciplines.
3. Peace studies is ‘reconstructionist’ in nature: students should think about the future and about what reforms or inventions may be necessary to produce a more desirable society or world.
4. Peace studies requires a moral commitment: although as academics we seek objectivity in our research methodology, we also acknowledge the role of values in the choice of topic and the determination of what is desirable. Peace studies explicitly states its position as being for peace and life and against violence and injustice.
5. Peace studies must have a ‘practical’ orientation: students should realize the applicability of their knowledge towards advancing the goals of peace and justice.

#### Requirements for the Peace Studies Certificate (24.000 credits):

PCST 101 - Introduction to Peace Studies	3 cr.
PCST 480 - Internship in Peace Studies	3 cr.
PCST 490 - Seminar in Peace Studies	3 cr.
Peace Studies Electives	15 cr.

Appropriate electives are determined through consultation between the student and the Peace Studies Director.

No more than 2 courses can be taken in any one department.

#### Requirements for the Minor, Peace Studies (18.000 credits):

PCST 101 - Introduction to Peace Studies	3 cr.
PCST 480 - Internship in Peace Studies	3 cr.
PCST 490 - Seminar in Peace Studies	3 cr.
Peace Studies electives	9 cr.

Appropriate electives are determined through consultation between the student and the Peace Studies Director.

Peace Studies Certificate students and Peace Studies Minor students are also eligible to participate in the American University Washington Semester Peace and Conflict Resolution track. After consultation with the Washington Semester coordinator, Dr. Leon Halpert, and the Peace Studies Director, students selecting this option may substitute PCST—789 for PCST—480, and may apply ATDV—788 or POSC—790 through 797 toward their Peace Studies electives. See the Washington Semester program section of the catalog for a program description.

### **Description of Courses**

PCST—101. Introduction to Peace Studies 3 credits

An introduction to the peace studies approach to conflict and conflict resolution from the interpersonal through the international level. Emphasizes the concepts of peace; conflict; violence; the origin, causes, and nature of war; the morality of war; alternatives to war and violence; social justice and injustice; just world order; nonviolent conflict resolution; and intercultural understanding. Course also open to students not electing the certificate. (ATTR: ARTS)

PCST—240. Topics in Peace Studies 3 credits

An examination of a particular topic which deals with the concepts of peace, conflict, nonviolence, and social justice. (ATTR: ARTS)

PCST—250. Empowerment, Social Action and Personal Transformation 3 credits

This course investigates the ways in which a commitment to nonviolent social action can transform and significantly empower people to bring about changes in themselves and in the larger society. By examining power and the means of resisting and acquiring it, by studying the ideas and accomplishments of several social activists, and by carrying out one or more projects aimed at social improvement, the instructors hope to assist the students in understanding how people can act to take control of their lives and achieve their goals for attaining a more peaceful and just world. (ATTR: ARTS, FSPC, PCST)

PCST—480. Internship in Peace Studies 3 credits

Provides students with experience using the peace studies approach to peace, conflict resolution and social justice through placement with private and governmental organizations. Students are required to work 8 to 10 hours per week. Evaluation is made by the staff of the participating institution and the Peace Studies Program Director. Prerequisites: PCST—101 and permission of the Director. (ATTR: ARTS)

PCST—490. Seminar in Peace Studies 3 credits

An integration of the Peace Studies program which involves examining and carrying out scholarly research on some particular aspects of peace, war, conflict resolution, violence, nonviolence, social justice or injustice, intercultural understanding, or a just world order. Prerequisites: PCST—101, PCST—480 or PCST—789, and at least 9 credits of Peace Studies electives. (ATTR: ARTS)

\*\*\*PCST—789. Washington Semester Peace Studies Internship 4 credits

This is the Peace Studies Internship for the Washington Semester Program, Peace and Conflict Resolution track. It provides students with a firsthand experience as a member of a staff directly involved in peace building and conflict resolution. The internship will be available with congressional offices, research think tanks and interest groups. Students will work two full days each week of the semester. Student evaluations will be based upon criteria established by academic and office supervisors. Prerequisites: PCST—101, POSC—100 and the permission of both the Peace Studies Director and the Washington Semester Coordinator, Dr. Leon Halpert. (ATTR: ARTS)

### **Pre-Law Studies Certificate Program**

Any student who has interest in pursuing legal study should get the most from their undergraduate education at Siena College. While no one curricular path serves as the gateway for preparation for law school, students should choose courses, whether in business, humanities, natural sciences or social sciences that sharpen their analytical reasoning and writing skills.

Intensive preparation for the study of law has provided our students with acceptance and matriculation to several of the most distinguished law schools in the United States including Ohio State University, Villanova, University of Virginia, and the College of William and Mary. Our alumni, upon graduation from law school, have entered major fields of law practice which include public service, private and corporate law, and the judicial profession.

Unlike a premedical curriculum that contains specific courses, some of which are mandatory, there is no sequence of prelaw courses at Siena College. It is important that students be introduced to broad legal principles and the case law approach to provide them with an informational basis to decide whether they want to continue with a legal education.

**Requirements for the Pre-Law Certificate (21.000 credits):**

PHIL 155 - Logic		3 cr.
MATH 010 - Finite Mathematics		3 cr.
WRIT 100 - Introduction to Writing		3 cr.
BLAW 200 - Legal Environment of Business	<b>OR</b>	
BLAW 210 - Commercial Transactions		3 cr.
MGMT 113 - Organizational Communication	<b>OR</b>	
WRIT 220 - Oral Communication		3 cr.
POSC 370 - Civil Liberties I (Offered Alternate Fall)	<b>OR</b>	
POSC 372 - Civil Liberties II (Offered Alternate Spring)		3 cr.
POSC 374 - Intro to Criminal Law (Offered Alternate Fall)	<b>OR</b>	
POSC 376 - The 4th, 5th,6th Amendments (Offered Alternate Spring)		3 cr.

All of the above courses are useful for enhancing communication skills, critical and analytical thinking for the LSAT, and the first-year curriculum at most law schools.

Siena College maintains cooperative 4/3 programs with three law schools (listed in the Affiliation/Articulation Agreements section of the catalog).

Students interested in attending Law school should visit and consult with Dr. Leonard Cutler, Pre-Law Advisor, and review with him the Law School handbook, law school catalogs, and application forms and information on the Law School Admission Test (LSAT). Additional information and other publications on the study of law are available at the Career Center.

**Certificate in Revolutionary Era Studies**

The Certificate in Revolutionary Era Studies is open to any student interested in the history of the American Revolution. The certificate program integrates multidisciplinary study of early American history with service learning. It prepares students for careers in museum studies, historic preservation, public history, and government as well as additional graduate training in public history, museum studies, historic preservation, library science, records management, and public policy.

In order to achieve the certificate and do the required internship, a minimum cumulative GPA of 3.0 must be maintained in courses for certificate credit. Students must also complete the requirements of their major field. For History and American Studies majors and History minors, HIST courses also can be used to satisfy departmental requirements. Students pursuing the certificate should consult Dr. Dorsey each semester to assure proper course selection

Students will choose their internship site in consultation with Dr. Jennifer Dorsey, Director of the McCormick Center for the Study of the American Revolution

**Requirements for the Revolutionary Era Studies Certificate (18.000 credits):**

HIST 312 - The American Revolution and the Atlantic World		3 cr.
AMST 480, HIST 480 or ADTDV 480 - Internship		3 cr.
Elective Area A		3 cr.
HIST 311 North American Colonies and the Atlantic World, 1492-1763		
HIST 313 Antebellum America, 1815-1854		
HIST 340 Latin America: The Colonial Period		
HIST 370 Africa I: Genesis of Modern Africa		
HIST 396 England from 1485-1815		
HIST 401 Colloquium in History (when appropriate)		

HIST 411 Slavery in Historical Perspective  
 HIST 415 French Revolution and Napoleon  
 HIST 455 The Westward Movement, 1750-1890  
 HIST 463 U.S. Military History  
 HIST 465 The Spanish Borderlands  
 AMST/HIST 485 Topics in Revolutionary America  
 HIST 499 History Capstone (when appropriate)

Elective Area B 3 cr.

ENGL 310 English Renaissance Literature  
 ENGL 315 Literature of the Enlightenment  
 ENGL 345 Early American Literature: Encounters, Enlightenment and Election (1500-1820)  
 POSC 329 Special Studies in American Politics (when appropriate)  
 POSC 339 Special Studies in Political Theory (when appropriate)  
 REL 300 Topics in Religious Studies (when appropriate)

Elective Area C (Select 2) 6 cr.

HIST/AMST 475 Public History  
 ENVA 440 Environmental Interpretation  
 ENVA 460 GIS : Environmental Applications  
 CSIS 010 Intro to Computer Applications  
 CSIS 110 Introduction to Computer Science  
 CSIS 200 Topics in Computer Science (when appropriate and including GIS introduction and web design introduction)  
 MGMT 211 Management Principles  
 MRKT 212 Marketing  
 MGMT 113 Organizational Communication  
 BLAW 200 Legal Environment of Business  
 CREA 280 Documentary Filmmaking

### Certificate in Risk Management

John C. O'Neill, Ph.D., Director

The Certificate in Risk Management is designed to give students additional practical knowledge in the area of modern financial techniques that actuaries will find useful during their career. The courses contained will provide additional background for topics covered in several of the ensuing actuarial exams encountered during their career. Students who complete this certificate should have the ability to pass both Exam 1/P and Exam 2/FM with a modicum of extra preparation.

A student who chooses to attain the certificate in risk management will develop (1) a strong mathematical background stemmed in current treatment of classical mathematics, (2) a firm understanding of applied mathematics via statistical analysis, (3) a practical sense of how these mathematics are used in business to solve problems, (4) a fundamental knowledge of economic theory and (5) an understanding of finance theory and the role of finance within the firm; and will understand how risks are identified, explored and ultimately managed through the use of modern financial instruments.

#### Requirements for the Risk Management Certificate (54.000 credits):

CSIS 110 - Intro to Computer Science	3 cr.
ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
ECON 430 - Econometrics	3 cr.
FINC 301 - Managerial Finance I	3 cr.
FINC 315 - Advanced Investments: Theory & Practice	3 cr.
FINC 340 - Insurance and Risk Management	3 cr.
FINC 421 - Business Financial Forecasting	3 cr.
FINC 432 - Portfolio Management	3 cr.
MATH 110 - Calculus I	3 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 371 - Probability for Statistics	3 cr.
MATH 470 - Mathematical Statistics	3 cr.

QBUS 480 - Mathematics of Finance		3 cr.
ACCT 200 - Financial Accounting	OR	
ACCT 205 - Managerial Accounting		3 cr.
MATH 230 - Linear Algebra	OR	
MATH 320 - Mathematical Analysis		3 cr.

A minimum grade of B- is required in order to count for credit towards the certificate.

### Women's Studies Minor

Dr. Laurie Naranch, Director

Women's Studies is an interdisciplinary field encompassing scholarship about women and gender. The Women's Studies minor at Siena introduces students to the analysis of gender roles in a variety of cultures, fosters an appreciation of diverse women's contributions to society and the arts, and trains students in the theories and research methodologies of women's studies. This minor offers students a means for understanding social, intellectual, and political forces that mold both men's and women's lives, and aids students in challenging sexism and other sorts of oppressions.

#### Requirements for the Minor, Women's Studies (18.000 credits):

WSTU 400 - Women's Studies Seminar		3 cr.
15 credits in Women's Studies		15 cr.

Because of the interdisciplinary nature of the program, many Women's Studies courses are cross-listed in other departments of the College. The course descriptions, including the years when they are offered and the prerequisites, can be found in the appropriate departmental section of the catalog. It is anticipated that students pursuing a Minor in Women's Studies and students who take only selected courses without pursuing the minor will choose the WSTU number. Courses that are counted toward a student's major may not also be counted toward the Women's Studies minor. The content and requirements of cross-listed courses are not affected by which course number the student selects for registration.

### Description of Courses

WSTU—300. Topics in Women's Studies 3 credits

This course will explore topics in Women's Studies that are not part of the regular course offerings. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with a different content. (ATTR: ARTS, WSTU)

WSTU—400. Women's Studies Seminar 3 credits

This seminar provides an advanced overview of the field of Women's Studies. The course emphasizes feminist theory, women's studies research methodologies, and contemporary political activism. Students complete advanced research projects, give group presentations, and engage in co-operative social justice actions. This course may be taken more than once with a different content. Prerequisite: Completion of 3 Women's Studies courses or permission of instructor. (ATTR: ARTS)

WSTU—499. Women's Studies Independent Study 1-3 credits

Students may pursue a topic of their choosing. A statement of the topic and plan of study, including bibliography, must be submitted in writing and approved by the professor and the director of the program. Student may choose to pursue a project that counts for 1-3 hours of course credit. This course may be repeated for an additional 1-3 hours of credit with a different topic. (ATTR: ARTS)

# School of Liberal Arts

Dr. Janet Shideler, Dean

Dr. Vera Eccarius-Kelly, Associate Dean

Ms. Donna Tytko, M.S., Assistant Dean for Student Services

Ms. Allison Schultz, M.P.P., Assistant Dean for Administration

## School of Liberal Arts Courses

### ATDV—105. Topics in Film 3 credits

A one-semester, three credit course in film studies taught periodically by faculty from the Schools of Liberal Arts, Science, or Business. Each time it is offered the course will focus on a single theme — for example, War in American Films, Horror from the 50's and 60's, The Western, and Film Noir—or on directors like John Ford, Woody Allen, Ingmar Bergman, and Akira Kurasowa. Combines theoretical, literary and historical studies with critical viewings of films. May be taken twice for credit under different themes. No prerequisites. (ATTR: ARTS)

### ATDV—110. Statistics for Social Science 3 credits

An introduction to statistical procedures and analysis, including descriptive and inferential statistics. Descriptive statistics include such areas as frequency distributions, measures of central tendency, and variance. Inferential statistics include tests of hypotheses for means, analysis of variance, and linear correlation. Not open to students who have taken QBUS—200 Business Statistics I. (ATTR: CDQ, ARTS)

### ATDV—200. Interdisciplinary Studies I 3 credits

Interdisciplinary Studies I examines issues facing human beings in today's natural world from the points of view of a variety of academic disciplines. Generally, different topics are covered each time the course is offered. Open to sophomore-level students and above. (ATTR: ARTS)

### ATDV—205. Interdisciplinary Studies II 3 credits

Interdisciplinary Studies II examines issues facing human beings in today's social world from the points of view of a variety of academic disciplines. Generally, different topics are covered each time the course is offered. Open to sophomore-level students and above. (ATTR: ARTS)

### ATDV—210. Perspectives on Women's and Multicultural Studies 3 credits

An interdisciplinary course designed to identify racist, heterosexist, ageist, anti-semitic, ableist, etc. assumptions in conventional scholarship; to develop an interdisciplinary critique of knowledge; to describe the development of stereotypes about disenfranchised groups throughout western culture; to recognize the contributions of women and members of other disenfranchised groups in various fields of human endeavor; to develop a holistic appreciation of the diversity of society. (Same as WSTU—100) (ATTR: ARTS)

### ATDV—250. Topics in the Humanities 1-3 credits

This course deals with topics and themes which cross normal disciplinary boundaries. The particular content will be indicated by subtitle. The course may be taken more than once with different content. Prerequisites will be set by the faculty teaching a specific course under this rubric. (ATTR: ARTS)

### ATDV—480. Internship in School of Liberal Arts 1 - 6 credits (6 credits maximum.)

Internship opportunities not covered by departmental areas. Permission of Dean required. (ATTR: ARTS)

### ATDV—499. Independent Study in the School of Liberal Arts 1 - 3 credits

This course provides an opportunity for seniors with a 3.0 or above to pursue independent study that is interdisciplinary or that does not fit within a single department's guidelines. The permission of a faculty member and the Dean is required. (ATTR: ARTS)

### ATDV—779. Topics in Intercultural Understanding, Arts 4 credits

This course, offered in a foreign country, is an intensive study of specific topics associated with international internships. The nature of the student's research will determine which division will award credit. The course will typically involve a high degree of independent research, oral presentations by the students, and a well-documented writing assignment. Besides the specific research coordinated with an internship, the course will emphasize issues in intercultural communication. A student will earn four credits for this course. (ATTR: ARTS)

**ATDV—781. International Internship, Arts 3 - 8 credits**

A student may earn 3-8 credits by serving as an intern in a foreign country. Placements are available for students from each school. The nature of the internship will determine which division will allocate credit. Typical opportunities include work in parliaments, law offices, theatres, museums, non-profit organizations, banking, hospitals and businesses. Students will work from 10 to 32 hrs. a week, depending on the program selected. The internship will involve a sizeable research project linked to the work undertaken. Prerequisites: students must be at least juniors, demonstrate self-motivation, good communication skills and trustworthiness. The GPA requirement is 2.75. Students who wish this internship to be counted as an equivalent to an internship in a department, must receive advance permission from the head of that department. (ATTR: ARTS)

**ATDV—787. Washington Semester Elective 3 credits**

Course to be determined by the student and Washington Semester Program Director. Students can select a course in subject areas such as History, Literature, Sociology, Computer Science, Mathematics, Biology, etc. (ATTR: ARTS)

**ATDV—788. Washington Semester Research 4 credits**

Consists of the research component of the Washington Semester Program. The student will pursue an independent research project under the direction of a faculty person in the academic track (American Government, Economic Policy, Justice, Foreign Policy or Peace and Conflict Resolution) that the student has selected for study in the Washington Semester Program. (See ECON—790-793, PCST—789, POSC—790-797.) See the Washington Semester section of the catalog for a description of this program. (ATTR: ARTS)

**ATDV—789. Internship in Washington Semester 4 credits**

This is the internship component of the Washington Semester Program. This provides the student with first-hand experience in an organization directly involved with the academic track being followed. The internship will be available with Congressional Offices and Committees, Executive branch agencies, interest groups, research think tanks and the media. Students work two full days each week of the semester. Student evaluations will be based upon criteria established by academic and office supervisors. See the Washington Semester section of the catalog for a description of this program. (ATTR: ARTS)

## **American Studies Program**

Co-Directors: Dr. Chris E. Farnan, Assoc. Prof. and Dr. Karen W. Mahar, Prof.

The American Studies Program at Siena College provides an interdisciplinary approach to the study of the American experience. Students may select from courses in areas such as American history, literature, art history, theatre, music, sociology, philosophy, economics, film, religion, and political science to fulfill requirements in the major and minor. This interdisciplinary approach is capped by AMST—450: American Studies Proseminar, and AMST—451: American Studies Thesis. American Studies majors are eligible to pursue the initial teaching certificate in Social Studies, but they may not be able to complete their undergraduate work in eight semesters.

**Requirements for the Major, B.A. in American Studies ( 39.000 credits ):**

HIST 203 - American History I	3 cr.
HIST 204 - American History II	3 cr.
AMST 450 - American Studies Seminar	3 cr.
AMST 451 - American Studies Thesis	3 cr.
6 credit hours in American Literature	6 cr.

The remaining 21 credits in American Studies must be chosen from Areas A, B, and C, with no less than 6 and no more than 12 credit hours in each area.	21 cr.
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**The Areas are:**

- Area A - Courses with AMSA attribute
- Area B - Courses with AMSB attribute
- Area C - Courses with AMSC attribute

**Auxiliary ( 6.000 credits )**

Two semesters in the same foreign language  
These languages include: French, Spanish, German,

Latin, Russian, Greek, Italian, or Arabic. 6 cr.  
American Sign Language does not fulfill this requirement.

**Requirements for the Minor, American Studies (18.000 credits):**

AMST 450 - American Studies Prof Seminar 3 cr.  
HIST 203 - American History I 3 cr.  
HIST 204 - American History II 3 cr.

One course from Area A (AMSA attribute) 3 cr.  
Two courses from Area B and/or Area C (AMSB or AMSC attribute) 6 cr.

History majors who minor in American Studies are required to take 15 credits from Area B and/or C and AMST 450.

**American Studies with Certification in Social Studies Education ( 33.00 credits)**

HIST—203 American History I 3 cr.  
HIST—204 American History II 3 cr.  
American Literature (ASTL) 6 cr.  
AMST—450 3 cr.  
AMST—451 3 cr. 3 cr.  
HIST —327 3 cr.  
  
American Studies electives 12 cr.

**Auxiliary ( 27.00 credits)**

Two semesters in the same foreign language 6 cr.  
These languages include: French, Spanish, German, Latin, Russian, Greek, Italian, or Arabic. American Sign Language does **not** fulfill this requirement.

History, European (HEUR) 6 cr.  
History, Non-Western (HNW) 6 cr.  
Sociology 3 cr.  
Economics 3 cr.  
Political Science 3 cr.

In addition to these requirements, students must complete the Education Certificate. Please see the Education Department for specific requirements.

Courses other than those listed below may be included in the student's program subject to the approval of the Director.

**Description of Courses**

AMST—401. Colloquium in American Studies 3 credits  
This course is designed to explore interdisciplinary topics concerning American culture, history, and life that are not treated in traditional course offerings. The area or theme will be studied in depth and there will be an emphasis on discussion. The subject will be announced before the semester in which the colloquium is to be given. The colloquium topic and instructor must be approved by the Director of the American Studies Program. May be taken twice with different topics. (ATTR: ARTS, AMST)

AMST—450. American Studies Proseminar 3 credits  
This is the capstone course for American Studies majors and minors. It is an intensive reading and discussion seminar that covers the development of the field of American Studies, as well as current theory and debates. AMST—450 is typically taken during the second semester of the junior year. Permission of the Instructor is required. (ATTR: ARTS)

AMST—451. American Studies Thesis 3 credits  
This is a directed research and writing course in which American Studies majors use their interdisciplinary background and their chosen themes to create an extensive, original research project. AMST—451 is typically taken during the first semester of the senior year. Permission of the Instructor is required. (ATTR: ARTS)

AMST—475. Public History 3 credits

This course considers the practice of history outside of the formal classroom. Areas of study may include, but are not limited to, museums, libraries, archives, state and national parks, historical societies, theme parks, publishing, filmmaking, archaeology, and historic preservation. (Same as HIST-475) (ATTR: ARTS, REC)

AMST—480. Internship in American Studies 3 credits

Interns work in historical societies, museums, resource centers, etc. (The evaluation of such credit is made by the staff of the participating institution and the Director.) Open to second semester juniors and seniors who have completed a minimum of 12 credit hours in history, including U.S. history, and who present at least a 3.0 GPA in their major and 2.9 overall. Permission of the Director of the American Studies Program is required. (Cross-listed as HIST—480)

AMST—485 Topics in Revolutionary Era History 3 credits

A study of specialized topics encompassing the Revolutionary Era from 1754 to 1815 that include: Economics of the Revolution; Education in the Colonies; Blacks in the Revolution; Free and Slave; Local History-Albany, Schenectady, Troy in the Revolution; Weapons and Tactics in the World and Revolution, 1785-1815; Colonial Women; Diplomacy in the Revolutionary Era. The specific topic is announced in the schedule of course offerings. Students may repeat the course for credit provided the selected subject matter has not been taken previously for credit. Prerequisite: HIST—203. (Cross-listed as HIST—485) (ATTR: ARTS, HAM, AMSA, HMAM, REA)

This is a partial listing of courses that satisfy American Studies Areas A, B and C. New courses may not appear here. Please contact the Program Director about courses that you think may qualify for American Studies. Course descriptions for the following areas may be found under the appropriate department.

Area A

AMST—485 Topics in Revolutionary Era History  
HIST—310 Colonial and Revolutionary U.S., 1600-1789  
HIST—313 Antebellum America, 1815-1854  
HIST—315 The Civil War and Reconstruction, 1850-1877  
HIST—320 Emergence of Modern America, 1869-1920  
HIST—323 Contemporary America, Since 1920  
HIST—325 United States Women's History  
HIST—327 New York State History  
HIST—401 -Colloquium in History (when topic is appropriate)  
HIST—451-453 U.S. Social and Cultural History to/from 1877  
HIST—455 The Westward Movement, 1750-1890  
HIST—457 American Immigration  
HIST—461 African-American History  
HIST—463 U.S. Military History  
HIST—465 Spanish Borderlands  
HIST—390-490 Honors Seminar (when topic is appropriate)

Area B

ECON—230 Economic History of the United States  
POSC—100 Contemporary U.S. Politics  
POSC—205 State and Local Government  
POSC—305 Metropolitan Government  
POSC—313 American Political Parties  
POSC—315 U.S. Congress  
POSC—320 The American Presidency  
POSC—329 Special Studies in American Politics  
POSC—351 U.S. Foreign Policy  
POSC—370-372 Civil Liberties I & II  
SOC1—120 Current Social Problems  
SOC1—130 The Family  
SOC1—150 American Indians  
SOC1—210 Race and Ethnic Relations

Area C

ATDV—105 Topics in Film (when topic is appropriate)  
CREA—255 American Art  
CREA—256 American Music  
CREA—258 American Theatre  
EDUC—220 History of Education in the United States  
ENGL—213 Survey of American Literature  
ENGL—345 Early American Literature (1500-1820)  
ENGL—350 American Renaissance Literature (1820-1865)  
ENGL—355 Realistic Movements in American Literature (1865-1915)  
ENGL—360 American Literature of the Jazz Age  
ENGL—365 Atomic Literature  
ENGL—368 The Literature of the War in Vietnam  
ENGL—370 African American Literature  
ENGL—372 Native American Literature  
ENGL—374 Asian American Literature  
ENGL—376 Latino/a Literature  
PHIL—420 Classic American Philosophy  
RELG—305 Religion in America  
RELG—310 The American Evangelical Tradition  
RELG—315 American Catholicism

**Creative Arts Department**

Chair: Ms. Denise Massman, Assoc. Professor

Prof.: Mr. Mahmood Karimi-Hakak

Assoc. Prof: Dr. Paul Konye

Asst. Prof: Ms. Elizabeth Blum, Mr. Scott N. Foster, Dr. Timothy J. Reno, Rebecca E. Taylor, Esq.

Visiting Asst. Prof.: Mr. David Lane, Dr. Margo Stavros

The goal of the Creative Arts Department is to engage students with works of the creative imagination. Courses are designed to achieve this goal through three approaches: 1) by developing within students an aesthetic appreciation of the arts of the world in which they live; 2) by enabling students to understand the arts as they reflect the cultural spirit of various epochs in human experience; and 3) by encouraging the unlocking and development of students' own creative potential.

In its major, the Department seeks to enable students to move freely among artistic disciplines. Through a curriculum that encourages students to create and respond to various art forms, students will be prepared for further academic or professional studies in the arts and related fields or to pursue a career as an artist (where apprenticeship and training are available in the field). Faculty, both individually and as a whole, actively advise and help shape students' development.

**Requirements for the Major, B.A. in Creative Arts ( 36.000 credits ):**

CREA 111 - Proseminar in Creative Arts	3 cr.
Two courses with an HAR attribute	6 cr.
CREA 490 - Seminar in Creative Arts	3 cr.
Creative Arts Electives*	24 cr.

\*15 of the electives must be 300 level or higher

\*\*CREA 101-104 may be taken as a CDA but none may be applied to the major.

**Requirements for the Minor, Creative Arts (18.000 credits):**

CREA 101 - Intro to the Creative Arts	<b>OR</b>	
CREA 111 - Proseminar in Creative Arts		3 cr.
15 credits Creative Arts Electives		15 cr.

Minimum of 9 credits must be 300 level or higher.

**Requirements for the Minor, Broadcast and Society (18.000 credits):**

3 courses from:

9 cr.

CREA 360 - Reporting for Radio and TV  
CREA 363 - Image and Society  
CREA 430 - Multimedia Interactive Design  
CREA 435 - Television Production Workshop  
CREA 480 - Internship in Creative Arts  
(placement must be in a broadcast position)

3 courses from:

9 cr.

CREA 108 - Intro to Broadcast Journalism  
CREA 117 - Communications Law and Ethics  
CREA 221 - Acting for the Camera  
CREA 275 - Film Theory and Criticism  
CREA 280 - Documentary Filmmaking

The following are career tracks a major or minor could follow with creative arts faculty advisement:

Intermedia Arts; Art History; Arts Administration; Arts Therapy; Conducting; Digital Art; Directing; Fashion Design; Film Studies; Graphic Design; Interior Design; Music Composition; Music History, Literature, Musicology; Performance; Theater Design; Theater Management/Producing; Vocal Performance; Theater Certificate Program.

**Description of Courses**

CREA—101. Introduction to Creative Arts 3 credits

This course will introduce students to the vocabulary, interpretive strategies and collaborative processes essential to developing their own ideas of interrelationships among various disciplines in the creative arts. Attendance at arts events outside of class is required. (ATTR: ARTS, CAA, CDA)

CREA—102. Introduction to the Visual Arts 3 credits

An introduction to a wide variety of forms and themes of the visual arts of the past and present. Students will learn the vocabulary necessary for analyzing and critically evaluating art. Attendance at a museum or gallery show is required. (ATTR: ARTS, CAA, CDA)

CREA—103. Introduction to Music 3 credits

An introduction to the major forms, techniques, and composers in all epochs of music history to develop a better understanding and enjoyment of the art of music. Attendance at designated music performances will be required. (ATTR: ARTS, CAA, CDA)

CREA—104. Introduction to Theatre 3 credits

An introductory exploration of the various elements involved in creating and responding to the theatre. This course will expose the student to the creative aspects of playwriting, acting, directing and design and will develop the critical skills necessary to the informed audience member. Through discussion and attendance at both professional and academic productions, the student will be exposed to the complexities of the art form and entertainment industry. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Lab Fee. (ATTR: ARTS, CAA, CDA)

CREA—108. Introduction to Broadcast Journalism 3 credits

A basic introduction to reporting and writing the news for broadcast, both radio and television. Students learn what constitutes news, how to develop news stories and the basic audio and video elements required in broadcast journalism. Students will explore legal and ethical issues in broadcast journalism and major developments in the broadcast journalism field. (ATTR: ARTS, NOEX, BCST)

CREA—111. Proseminar in Creative Arts 3 credits

This course will introduce students to the creative arts as a whole through the interaction between experiments in creative action and critical analysis. Fundamental questions about the nature of art and creativity, the art worlds and ethical dimensions, and the relation between the arts and society will be initiated. For each theoretical component of the course, there is a complementary creative exercise. Studio fee. (ATTR: ARTS, EXCA)

CREA—112. Basic Design I 3 credits

A foundation studio course exploring two-dimensional design problems through a controlled sequence of exercises in drawing, abstract black and white composition, and basic color theory and its application to design. Emphasis is placed upon developing a student's personal appreciation and creative expression rather than professional skill. Studio fee. (ATTR: ARTS, CAA, EXCA, MUMD, NOEX, CDA)

CREA—117. Communications Law and Ethics for Broadcast Journalists 3 credits

A survey of communications law including libel, privacy, confidentiality, and access to information as these issues pertain to broadcast journalists. This course also covers key ethical issues faced by broadcast journalists including finding facts through a variety of sources, dealing with conflict of interest, and avoiding harm. (ATTR: ARTS, BCST, MUMD)

CREA—120. Chorus 3 credits

The Siena College Chorus explores and performs choral music of all times and genres. All are welcome - there are no prerequisites. Chorus is a three-credit, full year course. A simple vocal placement by the instructor is required. (ATTR: ARTS)

CREA—135. Voice and Movement 3 credits

This is a performance course in physical and vocal technique for the stage and other performance media. General physical limbering and awareness and the development of a free and natural speaking voice pave the way for extensive exercises for the breath, resonance and vocal articulation as well as methodologies in movement, which include improvisation, group performances and individual movement techniques designed to increase the body's expressiveness. Presentations of scripted material, extracts from dramatic literature or poetry form the periodic "onstage" portion of this practical performance course. A field trip to a professional production is required. Lab fee. (ATTR: ARTS, CAA, CDA, EXCA, NOEX)

CREA—145. Introduction to Theatre Design 3 credits

An exploration of the theory and technique of current theatre technology, including scenery construction, scene painting, properties, lighting, sound, and costuming. Through discussions and laboratory experience in two campus productions, students will learn the practical application of theatre technology to the aesthetics of design. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Lab Fee. (ATTR: ARTS, CAA, NOEX)

CREA—165. Music Theory I Elementary Harmony 3 credits

Music Theory I is an introductory course in elementary harmony. Its main objective is to engage students in, and guide them through, the creative processes involved in music making and analysis through music notation, melodic writing, and elementary harmony. The stated objectives are achieved by engaging students in frequent hands-on in-class exercises and a final project. (ATTR: ARTS, EXCA)

CREA —173. Modern Dance Level I 1 - 3 credits

The course consists of studio work in Level I Modern Dance technique, principles and style. The student is expected to master the beginner level elements of alignment, placement, rhythm and execution of movements that are unique to the modern dance idiom. Written requirements include: research paper on specific modern dance choreographers and a critique of an assigned professional dance concert. Creative Arts Fee. (ATTR: ARTS, EXCA, NOEX)

CREA —172. Jazz Dance 1 - 3 credits

The course stresses rhythmical and expressive movement within the jazz idiom. While the course focuses primarily on Jazz Dance technique, some ballet and modern technique will be included in the warm-up. The class will consist of warm-up, isolations, strengthening and stretching exercises and patterns through space. Work will be done in the center as well as across the floor. There are no prerequisites. Creative Arts Fee. (ATTR: ARTS, EXCA, NOEX)

CREA—180. Experimental Video 3 credits

In this studio art course, students will make several short videos and present them to the class for discussion, as well as view and read about many experimental films and videos by artists of the 20th and 21st centuries. No experience in art, video, or sound production is necessary. The course goal is to become familiar with the history of this new art medium, and to gain experience in making, critiquing, and exhibiting one's own original videos. No prerequisites. (ATTR: ARTS, MUMD, NOEX)

CREA—200. Drawing I 3 credits

A studio course in which the fundamentals of drawing are taught. Students will use a variety of media and techniques while studying still life, landscape, and the human figure. Students will develop observational acumen and technical facility with drawing media. Emphasis will be placed on the creative application of the media and techniques taught. Studio fee. (ATTR: ARTS, CAA, CDA, EXCA,)

CREA—204. Digital Photography 3 credits

A beginning studio course exploring traditional photographic concerns as expressed through the digital format. Basic technical issues of camera operation, image processing via the computer, and print output are explored. Aesthetic issue regarding composition, light, subject matter, and photographic vision are stressed. Studio fee. (ATTR: ARTS, EXCA, MUMD, NOEX)

CREA—210. Orchestra 1-3 credits

Orchestra is a performance-based musical ensemble course that explores expressive, technical and stylistic approaches to interpreting standard and contemporary orchestral repertory, including different types and genres of art musics from a global perspective. The number of credits awarded will be determined by the instructor on the basis of workload and the level of responsibility. An assessment of competence, progress and improvement in orchestral work and attendance will determine the final grade. CREA—210 may be taken more than once to a maximum of six credits but may not exceed three credits in any one semester. Prerequisite: Audition and permission of instructor. (ATTR: ARTS, EXCA, NOEX)

CREA—213. Basics of Singing 3 credits

A performance course in the foundations of healthy singing technique, including posture, breath, sound production, resonance, registration, articulation, and diction. In addition to readings, exercises, and solo song literature, the student will develop musicianship skills such as listening, music sight-reading, presentation, and interpretation. A field trip to a professional production is required. (ATTR: ARTS, EXCA)

CREA—219. Acting I 3 credits

Students are acquainted with the process of actor training and character development through workshop, discussion, and attendance at professional and academic productions. Laboratory sessions are devoted to the preparation of scenes, exploration of the actor's body and voice, and an examination of the student's ability to feel, to communicate, and to imagine. This course is designed for students with no previous acting experience or those with some experience, but no training. A field trip to a professional production is required. Lab Fee. (ATTR: ARTS, CAA, CDA, EXCA, NOEX)

CREA—221. Acting for the Camera 3 credits

Students are acquainted with the process of acting for media that utilize the camera as a principal delivery system through workshop, discussion, observations and viewing and analyzing professional film and broadcast work. Laboratory sessions are devoted to exercises, the preparation of scenes, scenarios and journalistic reports and the exploration of technical skills. This course is designed for students with no previous camera acting or broadcast journalism experience or those with some experience but no training. Lab fee. (ATTR: ARTS, NOEX)

CREA—231. Art to the 15th Century 3 credits

From the earliest rock art of prehistory to the great stone cathedrals of the Middle Ages, this course examines the art of the world from the point of view of the cultures that produced them. Travelling through ancient spaces as well as time, students survey monuments like Stonehenge, the pyramids of Egypt, the complexes of Meso-America, the grave goods of ancient China, the Bronzes of ancient Africa, the temples, the churches and the shrines of the many religions that laid the foundations of our own world. (ATTR: ARTS, CAA, CDA, GLST, HAR, HGC, MRST)

CREA—232. Art from the 15th Century 3 credits

This course surveys the canon of art history from the fifteenth to the twentieth centuries – a group of artworks that are widely recognized as of enduring importance in human history. Some, like Michelangelo's Sistine Ceiling, are outstanding in their own right; others are examples of significant types, e.g. landscape paintings. All are studied with respect to the culture in which they were produced, and upon which they exerted influences. Included will be Leonardo da Vinci, Rembrandt, the Impressionists, architecture such as Versailles and the Taj Mahal, as well as the major developments of the modern world. (ATTR: ARTS, CAA, CDA, HAR, HGC, MRST, GLST)

CREA—242. Music from the 17th Century 3 credits

This course is a study of the major compositions, composers, and the stylistic characteristics usually associated with each of the historical music periods starting from the Baroque. The course is also designed to broaden students' artistic horizons and to unlock their creative potential as they become familiar with current trends in the arts. (ATTR: ARTS, CAH, HAR, HGC)

CREA—251. World Theatre History 3 credits

A survey of world theatre, from its origins to the 21st Century. This course focuses on diverse world views and functions of performance as seen in the theatre of various cultures and historical periods. Areas of study include the occasions, social contexts, styles, and locations of theatrical performance; methods of production; and critical perspectives. The course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Lab Fee. (ATTR: ARTS,CFD,HAR,HGC.)

CREA—254. Opera I 3 credits

A survey of operatic styles and major composers principally from early to modern opera geared to those students who are just beginning, or who have not yet begun, to take an interest in opera as well as for those who desire to know more about an art form they already enjoy. There is a required field trip. (ATTR: ARTS, HAR, HGC)

CREA—255. American Art 3 credits

A study of art in the United States from the seventeenth to the twentieth century considering both the European influence and American styles. Small group field trips to local/regional historic houses and museums are required. (ATTR: AMSC, ARTS, CAH, HAR, HGC)

CREA—256. American Music 3 credits

A survey of American music from the seventeenth century to the present. Attention will be given to the contributions of the early settlers, the influence of folk traditions, the contributions of ethnic and minority groups, and the major lines of development in symphonic music. (ATTR: ARTS, AMSC, HAR, HGC)

CREA—258. Diversity in American Theatre 3 credits

The course addresses issues of diversity in American society as they have been represented in the American theatre. Through class discussion, readings of play scripts and supplemental material, and attendance at both professional and academic productions, students will examine the various means through which American theatre addresses issues of race and ethnicity, gender, class, religion, and politics. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Lab Fee. (ATTR: AMSC,ARTS,CFD, HAR, HCG)

CREA—273. Modern Dance Level II 1 – 3 credits

The course consists of studio work in Level II modern dance technique, principles and style. The student is expected to master the elements of alignment, placement, rhythm and execution of movements that are unique to the modern dance idiom. Prerequisites: CREA 170 or permission of Instructor. Creative Arts Fee. (ATTR: ARTS, EXCA, NOEX)

CREA—275. Film Theory and Criticism 3 credits

This course provides a forum for observing, analyzing, discussing and writing about the aesthetics of film. This course also teaches the basics of film criticism and reveals how film criticism affects the making and re-making of film as genre. (ATTR: ARTS, BCST)

CREA—280. Documentary Filmmaking 3 credits

Through workshop, discussion, observations and viewing and analyzing professional documentaries, students are acquainted with the process of using a camera to produce audio and visual images that record and interpret existing events. The course will examine artistic methods for the production of documentaries as well as the social and political aspects of documentary film. Laboratory sessions are devoted to production and postproduction activities. This course is designed for students with no previous experience or those with some experience but no training. Lab fee. (ATTR: ARTS, NOEX, BCST, REC)

CREA—297. Special Topics in Creative Arts 0- 3 credits

Selected areas of study in visual art history, studio art, music or theatre. May be taken more than once with different content. A field trip to a professional music or theatre production, museum or visual art exhibition may be required. Consult the fall and spring schedules for specific content and length of class sessions. (ATTR: ARTS)

CREA—309. New Art Forms 3 credits

In this studio art course, students will be introduced to new art forms such as assemblage sculpture, sound art, action art, experimental video, and installation art. In addition to studying the history and theory behind new art forms, students will produce original pieces in these new media and present them to the class for discussion. No experience in art or in any of the technical aspects of these art forms is necessary. The course goal is to increase awareness and understanding of contemporary art, and to expand one's sense of aesthetics. No set prerequisites; registration by permission of instructor. (ATTR: ARTS, MUMD, NOEX)

CREA—311. Contemporary Critique 3 credits

This course is open to all Creative Arts majors and minors. Students will do and present academic research and creative work in any medium for class critique and discussion with the goal of defining their creative process and focusing their media and concepts. Art history majors will present papers critiquing their peers' work for discussion and feedback. In addition, contemporary arts theory and practice will be studied, analyzed and applied to one's own work. The class will also visit local arts organizations and come to better understand one's role as an artist in any specific community, the global publishing and electronic community, and one's options for both professional and avocational work in the arts. (ATTR: ARTS)

CREA—312. Basic Design II 3 credits

A basic studio course exploring three-dimensional design problems through a controlled sequence of projects dealing with form in space. Emphasis is placed upon developing a student's personal appreciation and creative expression rather than professional skill. Prerequisite: CREA—112 or 231 or permission of the instructor. Studio fee. (ATTR: ARTS, EXCA, NOEX)

CREA—313. Drawing II 3 credits

An intermediate level studio course designed to expand the student's knowledge of drawing techniques and media and to increase the range of creative application. Students will study still life, landscape, and figure directly. Emphasis will be placed on the creative application of the media and techniques taught. Prerequisite: CREA—200 or permission of the instructor. Studio fee. (ATTR: ARTS, EXCA,)

CREA—314. Painting I 3 credits

A studio course in which the fundamentals of painting are taught. The language of color, use of the brush, and articulation of forms will be explored through the observational study of a variety of subjects. Students will develop a technical facility with painting media. Emphasis will be placed on the creative application of the media and techniques taught. Prerequisite: CREA—200, or permission of the instructor. Studio fee. (ATTR: ARTS, EXCA)

CREA—325. Graphics 3 credits

A beginning studio course exploring the graphics print media. Problems of composition, color coordination, and image construction are explored using a range of techniques. Prerequisite: CREA—102, 112 or 200, or permission of the instructor. Studio fee. (ATTR: ARTS, EXCA, MUMD, NOEX)

CREA—327. Medieval Art 3 credits

This course offers an overview of the art of Europe from the beginnings of Christianity to the Renaissance, a span of over thirteen centuries of dynamic cultural change. In the predominantly illiterate Medieval cultures, visual art was used to establish and communicate the evolving religious and political values. Students will study the works of art and architecture for which the Middle Ages is justly renowned: illuminated manuscripts, sculpture, and architecture. Prerequisites: CREA—231 or permission of the instructor. (ATTR: ARTS, HAR, HGC, MRST)

CREA—328. Renaissance Art 3 credits

A survey of the arts of Italy and northern Europe in the fifteenth and sixteenth centuries, viewed in light of the humanism and naturalistic outlook of the period. Prerequisite: CREA—231 or 232. (ATTR: ARTS, HAR, HGC, MRST)

CREA—329. Modern Art 3 credits

A survey of major concepts in the visual arts from impressionism to the present. Prerequisite: CREA—232. (ATTR: ARTS, HAR, HGC)

CREA—330. Acting II 3 credits

A rigorous exploration of both the theory and practice of acting for the stage, focusing on textual analysis and its integration into the rehearsal process, improvisation and its contribution to role preparation, contemporary methods of actor training, audition techniques, and acting in nonlinear or non-traditional roles. Students will prepare scenes and audition monologues as an integral part of the course of instruction. This course is designed for students with prior on-stage experience and training in acting. A field trip to a professional production is required. Prerequisite: CREA—219. Lab Fee. (ATTR: ARTS, EXCA, NOEX)

CREA—335. Chamber Singers 0 - 3 credits

Through readings, vocal exercises, and the study of solo song literature, students will develop vocal techniques including breath control, sound production, resonance, articulation, and registration. Also included will be the art of song interpretation and presentation, and over-coming vocal performance anxiety. In addition to class time, students will schedule a weekly half-hour private coaching. A field trip to a professional production may be required. Details (including cost) will be provided at the beginning of term. Prerequisites: Permission of Instructor. This entails a formal audition to evaluate vocal ability and musical literacy. (ATTR: ARTS, EXCA)

CREA—345. Scenery Design 3 credits

A study of the aesthetics and mechanics of designing scenery for the stage. Students will utilize design, drafting and presentation skills developed in class to create scene renderings, elevations, models and working drawings based on the interpretation of a theatrical script. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Prerequisite: CREA—112 or 145, or permission of instructor. Lab Fee. (ATTR: ARTS, CAA, EXCA, NOEX)

CREA—347. Lighting and Sound Design 3 credits

A study of the aesthetics and mechanics of designing lighting and sound for the stage. Students will utilize design, drafting and presentation skills developed in class to create lighting cues, lighting plots, electrician schedules, sound plots, sound cues and sound recordings based on the interpretation of a theatrical script. Students will have the opportunity to explore the principles of lighting in a lighting laboratory using current technology. Students will also use current sound technology to record, construct and manipulate sound effects. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Prerequisite: CREA—112 or 145, or permission of instructor. Lab fee. (ATTR: ARTS, CAA, EXCA, NOEX)

CREA—348. Costume and Makeup Design 3 credits

A study of the aesthetics and mechanics of designing costumes and makeup for the stage. Students will utilize design and drafting skills developed in class to create costume renderings and patterns as well as makeup plots and palettes based on the interpretation of a theatrical text. This course is designed for students with no theatre experience as well as those already acquainted with the stage. A field trip to a professional production is required. Prerequisite: CREA—112 or 145, or permission of instructor. Lab Fee. (ATTR: ARTS, CAA, EXCA, NOEX)

CREA—349. Directing 3 credits

An introductory exploration of both the theory and practice of directing for the stage. Students will direct contentless scenes, short plays and/or contextual scenes from full length works, collaborating with students in

CREA—219 (Acting I) as an integral part of the course. This course is designed for students with an intermediate to advanced level of theatre experience and training. A field trip to a professional production is required. Prerequisite: CREA—219 and permission of the instructor. Lab Fee. (ATTR: ARTS, EXCA)

CREA—355. Creative Process in Contemporary Music 3 credits

This course is a study of the most recent examples of contemporary music. We will experience the creative process in these compositions through listening and analysis, and we shall even do a little composing and performing of our own. These compositions often reflect other artistic trends and utilize scientific fields in the creative process, for example minimalism, postmodernism, mathematics, acoustics, etc. Reading or writing music is not required. Prerequisite: CREA—103 or 165 or 242 or 254 or 256. (ATTR: ARTS)

CREA—357. Music Ritual and Creative Arts in Non-Western Cultures 3 credits

This is a study of musics of the world. We will also examine the context in which the music may be heard, such as dance, theatre, or religious ceremonies. We will explore relationships between music and other art forms, such as calligraphy, painting, and architecture. In other words, we will study the people through their musical practices. Reading or writing music is not required for this class. Prerequisite: CREA—103 or 242 or 254 or 256 or 257. (ATTR: ARTS, HAR)

CREA—360. Reporting for Radio and Television 3 credits

This course is a practical examination of reporting for radio and television outlets including cable. Students practice covering actual news events first for radio and then for television. They gain actual experience in the field with those skills they learn in the prerequisite course, Introduction to Broadcast Journalism, including interviewing, developing stories, and broadcast news writing. Further, students will learn to use a tape recorder and edit audio for their radio reports. They will also learn to shoot news video and edit video stories for use on the college's cable channel. Students will be introduced to the concepts of performance for broadcast reporting. Prerequisite: CREA—108. Lab fee. (ATTR: ARTS, BCST, CFH)

CREA—363. Image and Society 3 credits

This course provides a forum for observing, analyzing, discussing, and evaluating the effect of images on society. It offers training in visual literacy, the psychology of coding, perceiving and interpreting images. Prerequisite: CREA—232 or permission of the instructor. (ATTR: ARTS, BCST)

CREA—370. Improvisation in Dance 1 - 3 credits

This course explores the use of improvisation as a tool for the further development of the art of making dance. Students will explore the freedom of movement and with it, experimentation. The class will help the students gain an increased sensitivity to time, space, energy, motion, oneself and other people. Students will develop the skill to take an idea, concept or feeling and express it non-verbally. Students will learn to improvise with their bodies as an instrument, with abstract elements of dance and with the environment in which dance exists. Prerequisites: CREA 170, CREA 172 or permission of Instructor. Creative Arts Fee. (ATTR: ARTS, EXCA, NOEX)

CREA—397. Advanced Topics in Creative Arts II 0 - 3 credits

Selected areas of advanced study in visual art history, studio art, music, or theatre. May be taken more than once with different content. As with CREA—297 a field trip may be required. Consult the fall and spring schedules for specific content and length of class sessions. (ATTR: ARTS)

CREA—420. Painting II 3 credits

An intermediate studio course exploring further color, spatial, and perceptual complexities of painting. Students will develop their own creative voice and pictorial strategies. Emphasis will be placed on the creative application of the media and techniques taught. Prerequisite CREA - 314 or permission of the instructor. Studio fee. (ATTR: ARTS, EXCA)

CREA—430. Multimedia and Interactive Design/Producing 3 credits

This course is designed to introduce students to interactive media and online reporting. Students will learn the technology required to design and produce a web site. They will learn to write for new media, particularly the internet. Students will also practice using the internet for journalistic research. This course will also be open to students interested in using the internet for distributing their creative work. No previous experience with web design is required. Prerequisites: CREA—112 and 360. Lab fee. (ATTR: ARTS, BCST)

CREA—435. Television Production Workshop 3 credits

This course is a practical introduction to the aesthetic principles, creative process and technology used to create multi-camera and single camera television programs in the studio and in the field. It also introduces the post-production process and video editing using non-linear software along with newly emerging digital technology. This course examines television production methods required for both non-fiction programming such as broadcast news and fiction-based productions. Prerequisite: Permission of Instructor. Lab fee. (ATTR: ARTS, BCST, NOEX)

CREA—450. Acting Practicum 1-3 credits

This course awards academic credit to eligible students for the laboratory exploration of theatrical process as actors in the production program. The number of credits awarded will be determined in advance by the Program faculty on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in the production program will determine the final grade. CREA—450-454 may be taken more than once to a maximum of six credits, but may not exceed three credits in any one semester. A field trip to a professional production is required. Lab Fee. Prerequisites: Permission of program director and CREA—219. (ATTR: ARTS, EXCA, NOEX)

CREA—451. Directing Practicum 1-3 credits

This course awards academic credit to eligible students for the laboratory exploration of theatrical process as directors in the production program. The number of credits awarded will be determined in advance by the Program faculty on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in the production program will determine the final grade. CREA—450-454 may be taken more than once to a maximum of six credits, but may not exceed three credits in any one semester. A field trip to a professional production is required. Lab Fee. Prerequisites: Permission of instructor and CREA—349. (ATTR: ARTS, EXCA, NOEX)

CREA—452. Design Practicum 1-3 credits

This course awards academic credit to eligible students for the laboratory exploration of theatrical process as designers in the production program. The number of credits awarded will be determined in advance by the Program faculty on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in the production program will determine the final grade. CREA—450-454 may be taken more than once to a maximum of six credits, but may not exceed three credits in any one semester. A field trip to a professional production is required. Lab Fee. Prerequisites: Permission of instructor and CREA—345 (Scenery Design) or CREA—347 (Lighting and Sound Design) or CREA—348 (Costume/Makeup Design). (ATTR: ARTS, EXCA, NOEX)

CREA—453. Technology Practicum 1-3 credits

This course awards academic credit to eligible students for the laboratory exploration of theatrical process as technicians in the production program. The number of credits awarded will be determined in advance by the Program faculty on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in the production program will determine the final grade. CREA—450-454 may be taken more than once to a maximum of six credits, but may not exceed three credits in any one semester. A field trip to a professional production is required. Lab Fee. Prerequisites: Permission of instructor. (ATTR: ARTS, EXCA, NOEX)

CREA—454. Stage Management Practicum 1-3 credits

This course awards academic credit to eligible students for the laboratory exploration of theatrical process as stage managers in the production program. The number of credits awarded will be determined in advance by the Program faculty on the basis of workload and the degree of difficulty of the assignment. A satisfactory written report, practicum journal, and participation in the production program will determine the final grade. CREA—450-454 may be taken more than once to a maximum of six credits, but may not exceed three credits in any one semester. Lab Fee. Prerequisites: Permission of instructor. (ATTR: ARTS, EXCA, NOEX)

CREA-460. Figure Studio 3 credits

A studio course exploring the unique place of the human body within the tradition of two-dimensional art. Drawing and painting from live models with emphasis on the creative application of the media and techniques taught. Prerequisites: CREA-200. (ATTR: ARTS, CFH, EXCA)

CREA—480. Internship in Creative Arts 3 credits

The internship provides students with practical experience in a professional arts environment. Prerequisite: Permission of the department chair. (ATTR: ARTS, INT, EXCA, NOEX)

CREA—490. Seminar in Creative Arts 3 credits

An integration of the Creative Arts major that investigates issues related to the contemporary art world as exemplified in students' research and creative interests. Though intensive study and research, students will examine current trends, and critical perspectives in art. Field trips may be required. Prerequisites: Completion of a minimum of 30 credits in Creative Arts and concurrent registration in any unfulfilled major requirements. (ATTR: ARTS, NOEX)

CREA—497. Independent Study in Creative Arts 0 - 3 credits

Qualified students may pursue a topic of their choosing that must be submitted in writing and approved by the professor and the department.

### **Theatre Certificate**

Students earning a certificate in the Theatre Program may choose to pursue careers as drama directors and educators in the secondary school system, as theatre practitioners, or might choose to deepen their understanding and appreciation of the art form through graduate study. Knowledge and skills gained through the program are applicable to a variety of careers outside theatre.

**Requirements for the Theatre Certificate (24.000 credits):**

CREA 104 - Introduction to Theatre		3 cr.
CREA 219 - Acting I		3 cr.
CREA 349 - Directing		3 cr.

Students must take one course from each of the following sections:

Survey of Dramatic Literature: ENGL 250 - The Drama		3 cr.
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Theatre History: CREA 251 - World Theatre History	<b>OR</b>	
CREA 258 - Diversity in American Theatre		3 cr.

Theatre Design or Technology: CREA 145 - Intro to Theatre Technology	<b>OR</b>	
CREA 345 - Scenery Design	<b>OR</b>	
CREA 347 - Lighting and Sound Design	<b>OR</b>	
CREA 348 - Costume and Makeup Design		3 cr.

Theatre Elective: CREA 213 - Basics of Singing	<b>OR</b>	
CREA 254 - Opera I	<b>OR</b>	
CREA 297 - Special Topics: Creative Arts	<b>OR</b>	
CREA 330 - Acting II	<b>OR</b>	
CREA 397 - Advanced Topics: Creative Arts	<b>OR</b>	
CREA 480 - Internship in Creative Arts	<b>OR</b>	
ENGL 240 - Shakespeare	<b>OR</b>	
ENGL 285 - Topics in English (DRAM)	<b>OR</b>	
ENGL 090 - Honors-Great Books (DRAM)	<b>OR</b>	
ENGL 290 - English Honors Seminar: Select Topics (DRAM)	<b>OR</b>	
ENGL 390 - English Honors Seminar: Select Topics (DRAM)	<b>OR</b>	
ENGL 490 - English Honors Seminar: Select Topics (DRAM)		3 cr.

One additional course from between CREA 450 through 454		3 cr.
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**Internship**

Students enrolled in the Theatre Certificate Program have the option of choosing an internship with a professional theatre organization (CREA—480 Internship in Creative Arts) provided advance approval from the major advisor and the department chair is received. To be considered for an internship, the student must satisfy the academic standards for the certificate program and must have achieved at least a B grade in all courses required for the Theatre Program certificate.

All theatre internships must be in one of the following areas: acting, directing, scenery, costume, lighting, sound or stage management. Sales or box office positions would not qualify. Internship participation would occur during the student's senior year and would be administered by the department chair.

**Economics Department**

Chair: Dr. James F. Booker, Prof.  
Prof.: Dr. Linda L. Richardson#, Dr. W. Scott Trees  
Asst. Prof.: Ms. Cruz Bueno, Dr. Arindam Mandal, Dr. Aaron N. Pacitti,  
Dr. Ashley J. Provencher, Dr. Smita Ramnarain

The Department of Economics provides students with an opportunity to study the major economic relationships present in every society. Students will study alternative ways of meeting needs within institutional and resource constraints.

Students who wish to major in economics may choose from two courses of study leading to either a B.A. degree through the School of Liberal Arts or a B.S. Degree through the School of Business. For information on the B.S. degree, please see the economics section under the School of Business.

The B.A. program offers students the methodology and analytical techniques appropriate for graduate work in economics and related professions such as Planning, Public Administration, and Law. It provides a foundation for research and analysis in academic and government institutions. Students will explore both theoretical and quantitative analysis, including work with general software and advanced statistical packages.

**Requirements for the Major, B.A. in Economics ( 30.000 credits ):**

ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
ECON 201 - Micro-Economic Analysis	3 cr.
ECON 202 - Macro-Economic Analysis	3 cr.
ECON 430 – Econometrics	3 cr.
Economics electives	15 cr.

Economics electives will be selected after consultation with an academic advisor to determine the best mix of courses to prepare the student for their career and educational goals.

**Auxiliary ( 12.000 credits )**

Any CSIS course		3 cr.
QBUS 100 - Math for Decision Making I	<b>OR</b>	
MATH 050 Preparation for Calculus		3 cr.
QBUS 110 - Math for Decision Making II	<b>OR</b>	
MATH 110 - Calculus I	<b>OR</b>	
MATH 120 - Calculus II		3 cr.
QBUS 200 - Business Statistics	<b>OR</b>	<b>4 cr.</b>
ATDV 110 - Statistics for Social Science	<b>OR</b>	
MATH 371 - Probability for Statistics		3 cr.

Please Note: For B.A. and B.S. Economics majors, three Finance courses are cross-listed with Economics and count toward the degree (FINC—212 = ECON—210; FINC—421 = ECON—420; FINC—422 = ECON—320).

*B.A. Economics majors must complete 90 credits in "Arts."*

**Requirements for the Minor, Economics (18.000 credits):**

ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
ECON 201 - Micro-Economic Analysis	3 cr.
ECON 202 - Macro-Economic Analysis	3 cr.
Economics Electives	6 cr.

**Description of Courses**

ECON—101. Principles of Economics, Micro 3 credits

This course introduces students to fundamental economic concepts and theory, including demand, supply, and the formation of equilibrium prices in product and resource markets. In addition, the course offers an introduction to applied fields such as industrial organization (market structures), labor economics, unionism, international trade, and market failure. (ATTR: ARTS or BUS, CAS, ISP, CDS)

ECON—102. Principles of Economics, Macro 3 credits

This course examines the foundations of economic theory as it relates to unemployment, inflation, and economic growth. Topics might include aggregate demand, aggregate supply, market equilibrium, national income accounting, theories of income determination, money and banking, and fiscal and monetary policies. (ATTR: ARTS or BUS; CAS, ISP, CDS)

ECON—201. Micro-Economic Analysis 3 credits

An intermediate-level treatment of the theories of consumer behavior and demand, production and cost, the firm and market organization, and factor markets. Microeconomic topics might include price control, pollution, efficiency, equity, taxes, subsidies, and government regulation. Prerequisite: ECON—101 and ECON—102. (ATTR: ARTS or BUS)

ECON—202. Macro-Economic Analysis 3 credits

An intermediate-level examination of Classical and Keynesian models of income determination, post-Keynesian thought and the Monetarist alternative, and the problems of inflation, employment, and growth. Prerequisite: ECON—101 and ECON—102. (ATTR: ARTS or BUS)

ECON—210. Money and Banking 3 credits

This course is designed to develop the student's understanding of the structure and function of our banking system and the role of monetary policy in determining economic activity. Topics included are: the nature of money, the term structure of interest rates, the regulation of commercial bank activity, and the macro-monetary models used to predict future economic conditions. Prerequisite: ECON—102. (Same as FINC—212) (ATTR: ARTS or BUS; ISP)

ECON—220. Labor Economics 3 credits

A general survey of the American labor force reveals the changing nature of work, changing labor force participation rates by age and sex, and the growing importance of minority representation. Traditional labor market models of wage determination are supplemented by considerations of institutional constraints, employee benefits, and forms of wage discrimination. Special topics include: types of unemployment, federal manpower programs, and the history of American trade unionism. Prerequisite: ECON—101. (ATTR: ARTS or BUS)

ECON—230. Economic History of the United States 3 credits

The economic development of the United States from early beginnings to present time. A chronological approach is used to study economic aspects of the major problems of each period. (ATTR: AMSB, ARTS or BUS)

ECON—300. Topics in Economics 3 credits

This course will explore a topic not covered in regular offerings. May be taken more than once with specific content. Consult the fall and spring course schedule for specific topics offered. Prerequisite: ECON—101 or ECON—102. (ATTR: ARTS or BUS)

ECON—320. Public Finance 3 credits

Public finance focuses upon the rationale and impact of the government's collection of revenue and its expenditures. Topics to be covered include the budget system, principles of taxation, tax incidence, the principles of expenditures, the impact of spending on private behavior, as well as the ability of the process to produce appropriate decisions. Prerequisite: ECON—101 and ECON—102, ECON—210 or permission of instructor. (Same as FINC—422) (ATTR: ARTS or BUS)

ECON—325. Health Economics 3 credits

Health economics examines the economic forces which shape the delivery of health care services and the public health environment in which we conduct our everyday lives. The course also examines the health impacts and costs of alternative policy choices. Prerequisite: ECON-101. (ATTR: ARTS or BUS)

ECON—330. History of Economic Doctrines 3 credits

A critical examination of the development of the major schools of economic thought from the seventeenth through the early twentieth century, with particular attention on mercantilism, classicism, marginalism, socialism, and neo-classicism. This course is primarily a reading program and is restricted to junior and senior level students from all areas of the college. Prerequisite: ECON—101. (ATTR: ARTS or BUS)

ECON—335. Political Economy 3 credits

Political economy is the study of economic systems, institutions, and outcomes from the perspective of who gains and loses. Conflict over the distribution of these gains and losses, and the use of power to obtain a desired economic outcome will be the focal points of much of our analysis. As such, the methodology used in this course will differ substantially from that used by mainstream economics, which focuses primarily on efficiency and growth and ignores different concepts of economic justice and the role of distribution and power in affecting economic outcomes. To facilitate this approach, this course takes a critical look at American capitalism from

contrasting theoretical perspectives, where the interaction of political, social, and cultural forces is brought to bear on economic interactions. This will allow us to develop a broader and more sophisticated perspective on how the American economy actually works, why it doesn't always work, who it works for and against, and why it changes over time. Prerequisites: ECON—101 and ECON—102. (ATTR: ARTS or BUS)

**ECON—340. Environmental Economics 3 credits**

An examination of how the natural environment is affected by the economic activities of society, and the physical and biological limitations imposed on the economy by the natural environment. Particular areas examined include the use of non-renewable natural resources, market failures, economic methods for analyzing pollution, cost/benefit analysis, the impact of population growth, and the values implicit in free market economies toward the natural environment. (Same as ENVA—300.) Prerequisite: ECON—101. (ATTR: ARTS or BUS)

**ECON—350. Comparative Economics 3 credits**

A survey of different forms of national capitalist economic organization, e.g. comparisons of the U.S., Germany and Japan with regard to institutional and policy-making differences as they affect the distribution of wealth and income and social welfare. Other topics include comparisons of various socialist economies and formerly socialist economies in Eastern Europe and China, as well as the emerging hybrid forms of economic organization in those societies. Prerequisite: ECON—102 or permission of the instructor. (ATTR: ARTS or BUS; GLST, ISP)

**ECON—360. Economic Development 3 credits**

An analytical approach to the economic problems of the developing countries. The course includes a discussion of the theories of economic growth and development, including domestic and international issues. This material is augmented by the use of empirical studies of the developmental process. Prerequisite: ECON—101 or ECON—102. (ATTR: ARTS or BUS; GLST, MCCP)

**ECON—370. International Trade Theory 3 credits**

An examination of bases, advantages and problems of international trade from the perspective of classical, neoclassical and modern theories. Key topics include determinants of the gains from trade, changes in income distribution resulting from trade, the rationale and consequences of commercial policies (e.g. tariffs, quotas and subsidies) and industrial policies designed to enhance the trade competitiveness of trading economies. Emphasis is placed on the consequences of income distribution from trade and, therefore, on questions of equity and efficiency. Prerequisite: ECON—101. (ATTR: ARTS or BUS; GSIB, ISP)

**ECON—420. Business Financial Forecasting 3 credits**

This course explores the nature and causes of fluctuations in aggregate business activity and the technique used to forecast. To gain an understanding of these techniques, and the usefulness of forecasts, students will prepare a forecast and explore its application to firm decision making. Prerequisite: QBUS—200. (Same as FINC—421) (ATTR: ARTS or BUS)

**ECON—430. Econometrics 3 credits**

An introduction to the application of statistical techniques to economic problems. This course includes a review of probability theory, mathematical expectation, and theoretical frequency distributions along with considerations of modeling economic phenomena. Ordinary and two-stage least squares regression techniques are utilized for hypothesis testing and economic forecasting. Prerequisites: QBUS—200 or ATDV—110, ECON—101 and ECON—102. (ATTR: ARTS or BUS)

**ECON—490. Seminar in Advanced Economic Theory 3 credits**

Analysis of selected topics on an advanced level. Topics are drawn from micro and macro-economics. The course is designed to acquaint the student with advanced subjects and original literature. This course may be taken more than once with different content. Prerequisites: ECON—201, 202. (ATTR: ARTS or BUS)

**ECON—499. Independent Study 1 - 3 credits**

A qualified student may pursue a particular project/topic in the field of Economics in his/her junior or senior year. The project requires the approval of the faculty member involved and the Department Head. A satisfactory written report and/or examination will determine the final grade. Only one independent project may be undertaken in any academic year. Prerequisites: ECON—201, 202 and Junior or Senior status. (ATTR: ARTS or BUS)

**ECON—790. Washington Semester Economic Policy. Seminar I 4 credits**

The Washington Economic Policy Semester provides a seminar which offers a theoretical analysis of contemporary economic problems; presentation of alternative paradigms used to understand economic problems; extensive readings; preparation of papers; and on-site discussions of economic policy decisions. Meetings are generally four to six times per week and may be held at field sites as well as on campus. (See: ATDV—788, 789) (ATTR: ARTS or BUS)

ECON—791. Washington Semester Economic Policy. Seminar II 4 credits  
This is a correlated course to the work being carried on in ECON—790. (See: ATDV—788, 789)

ECON—792. Washington Semester Business and Trade Seminar I 4 credits (See: ATDV—788, 789)

ECON—793. Washington Semester Business and Trade Seminar II 4 credits (See: ATDV—788, 789)

## **Education Department**

Chair: Dr. Mark Jury, Assoc. Prof.

Prof.: Dr. Robert Colesante, Dr. Cheryl J. Gowie

Asst. Prof.: Dr. Jesse Moya

Director of Field Experiences: Mr. Ralph DiMarino

Senior Research Analyst: Mrs. Doreen Dedjoe

As a CAEP accredited institution, the purpose of the Department of Education is twofold: (1) to provide a selection of courses enabling students across the College to understand and reflect upon educational theories and issues whether as citizens, parents, and/or educational professionals. These courses blend rigorous intellectual work in social science and professional preparation, and encourage students to apply this understanding across a multitude of contexts; (2) to offer a comprehensive program for students seeking New York State initial teaching licensure at the secondary (adolescent) level in a number of areas.

The tradition of Siena College requires broad training in the liberal arts as well as a concentration in a major field of study. The Department's goal is to enable educators to acquire the professional knowledge base and competencies characteristic of effective teaching. Through our goal of preparing teachers well-grounded in the professional knowledge base and the Franciscan liberal arts tradition, the mission of the Department of Education reflects the mission of the College. Within this framework, students develop the skills of critical thinking and expression as well as empathy and concern for all individuals.

As part of their course work, students will complete one hundred and ten hours of field experience prior to the student teaching experience. For students in the certification sequence, these experiences are in varied secondary school settings and follow the guidelines outlined in the Field Experience Program Handbook. Students are responsible for their own transportation.

The Department offers programs leading to New York State Initial Teacher Certification in Adolescence Education (grades 7-12) in the following areas: Biology, Chemistry, English, French, Mathematics, Physics, Social Studies, Spanish, and general science. The Department also offers a program leading to New York State Initial Teacher Certification in Business and Marketing (all grades).

Students who successfully complete EDUC—360 (Adolescence and Schooling) and EDUC—385 (Teaching and Learning in the Middle School), and who have completed an approved program for an initial certificate in adolescence education grades 7-12, are eligible for an extension of their teaching certificate into grades 5-6.

In addition, the Department offers elective courses that will allow education students the opportunity to expand their knowledge and understanding of the field. For the non-certification student whose career goals are education-related, the Department provides the opportunity to develop a sequence of courses that will serve as a foundation for graduate work in fields such as elementary education, school psychology, guidance and counseling, school social work, reading and literacy, or special education.

New York State requires that all prospective teachers study a language other than English at the college level. The Department has guidelines for CLEP-exam "equivalence." Certificate programs are subject to change by NYS Education Department without prior notification.

The following requirements must be met before acceptance into the Teacher Preparation Program's Professional Sequence:

Siena Undergraduates

1. Successful completion of EDUC—210, EDUC—260, EDUC—261 and EDUC 365;
2. Submission of an acceptable portfolio, including application, CAPP Report, application essays, and graded paper from a course in the student’s major;
3. Demonstrated success in field placements;
4. Evaluation and recommendation by The Education Department (minimum Education GPA of 3.0);
5. Evaluation and recommendation by the candidate’s academic major department;
6. Review and approval by the Education Professions Committee (EPC).

Returning Students

Same as above plus:

1. Initial Interview with the Director of Field Experiences & Accreditation;
2. Endorsement by the academic department after review of all transcripts;
3. 2-3 letters of recommendation from former professors and/or employers;
4. Interview with the Education Professions Committee (EPC).

All written materials must be submitted to the Education Department Chair, prior to October 1 for the following fall semester clinical experience or before February 1 for the following spring semester clinical experience. A minimum grade of “B” in all courses within the professional sequence is required to maintain good standing as a candidate in the program. All students in seeking certification for teaching a foreign language must take the Oral Proficiency Interview and receive a score of at least Intermediate High to be approved as a candidate and must receive a score of at least Advanced Low before completing the program to receive the college’s recommendation for certification.

Students who withdraw from the certification program or who postpone their professional semester without informing the Education Department in writing will be required to reapply.

Students who complete the program requirements and receive a score acceptable to the Commissioner of Education on the three required New York State Teacher Certification Examinations (LAST, ATS-W, CST) will be eligible to apply for the New York State Initial Certificate in their field. Verified data for Siena College program completers for the 2007-2010 school years are as follows: Liberal Arts and Sciences Test (LAST) - pass rate = 100%, and for the Assessment of Teaching Skills - Written (ATS-W) - pass rate = 100%; and for the Content Specialty Tests (CST) - pass rate = 93%.

Although they will be advised through the appropriate department concerning requirements in their major, students in education programs should consult with the Education Department faculty early concerning program and certification policies. Students who are not following the certification program, but who are interested in using education for related career opportunities, may seek advisement from the Education Department staff as well.

Relevant statistics about the labor market and job availability for each certificate title for which a teacher education program is offered, including the source of the statistics and the period of time and geographic area to which the statistics refer, may be found at the Siena College Education Department website (<http://www.siena.edu/education>), which also contains links to relevant supply and demand data supplied by the New York State Education Department.

**Requirements for the Education Certification (30.000 credits):**

EDUC 210 Issues in Contemporary American Education	3 cr.
EDUC 260 Educational Psychology	3 cr.
EDUC 261 Foundations in Language and Literacy	3 cr.
EDUC 365 Exceptional and At-risk Learners	3 cr.

After completing these courses, one must apply to the Education Department. Upon approval, the following courses are required to obtain the certification:

EDUC 481 - Instructional Theory & Practice in Inclusive Classrooms	3 cr.
EDUC 482 - Instructional Theory & Practice in Inclusive Classrooms	1 cr.

The following courses are completed during the semester students participate in student teaching:

EDUC 461 - Literacy: Middle and High School	3 cr.
EDUC 462 - Literacy and Reflective Practitioner	1 cr.
EDUC 487 - Clinical Experience in Middle School	5 cr.

EDUC 488 - Clinical Experience in High School	5 cr.
EDUC 495 - Drug Alcohol Tobacco Workshop	0 cr.
EDUC 496 - Child Abuse and School Violence Workshop	0 cr.

Students need to plan their programs so that they may follow the requirements of the year-long Professional Sequence. Students planning to study abroad are urged to consult early with faculty in the Education Department about their schedules. The international experience may not interrupt the professional sequence. Transfer students interested in the certification program should also contact the Education Department prior to planning their coursework at Siena.

Initial Teacher Certification for those already holding the bachelor's degree. On a limited basis the Department offers the opportunity to attain an Initial Teaching Certificate in Adolescence Education (grades 7-12) or an Initial Teaching Certificate in Business and Marketing (all grades) to individuals who already possess a bachelor's degree. The program consists of a minimum of 30 credit hours, not including the State foreign language requirement. To be admitted the individual must meet the requirements for Returning Students outlined above. Further information is available in the Education Department. A minimum overall GPA of 2.75 is required. Individual programs will vary according to the prior educational experiences of the student; however, any program devised will always contain the requirement for completion of the entire Professional Sequence through Siena's Education Department.

Education Electives: In addition to meeting the minimum requirements for certification, the Department encourages its students to elect other education courses that will broaden their professional knowledge and increase their ability to deal with the complex issues addressed by classroom teachers of today. These electives are also open to non-education teacher certificate students who desire to consider educational questions in a formal manner.

Siena/Sage Agreement: An agreement between Siena College and Sage Graduate School affords Siena graduates who have completed our secondary certification program automatic acceptance to a masters degree program in Elementary Education, Health Education, Guidance and Counseling, Reading, Special Education, and Reading/Special Education. Siena students who do not enter our secondary certification program can still receive automatic acceptance in the programs listed by completing an acceptable series of courses at Siena with a recommendation from Siena Education Department faculty. Other advantages include waiver of the application fee, graduate advisement in spring of the senior year and automatic acceptance into the one-year, paid internship program and the opportunity to apply early for graduate assistantships in Sage Graduate Schools. (ATTR: ARTS)

### **Description of Courses**

With the exception of courses in the professional sequence,  
Education courses are open to all students.

#### **EDUC—210. Issues in Contemporary American Education 3 credits**

This introductory course orients the student to the professional field of education and schooling in the United States. Issues researched and discussed include but are not limited to the following: history and philosophy of education; purpose and role of public education; rights and responsibilities of all educational stakeholders; governance at the local, state, and federal level; and interactions among the school, home, and community that support and enhance student learning. In particular, this course will explore the issue of educational access, emphasizing student diversity within the full range of disabilities and special needs. A ten-hour field experience is required (transportation is the responsibility of each student). For students pursuing Siena's certification sequence, the field experience must be at the secondary level (grades 7-12). (ATTR: ARTS, CAS, CDS)

#### **\*\*\*EDUC—220. Democracy and Pluralism in American Education 3 credits**

This course will analyze developments in American education from the colonial period to the present. Since educational theories and systems create and are created by the social, intellectual, economic, and political milieu, educational developments will be viewed in the light of important trends in American society. Attention will be given to fundamental ideological questions including the relationship of power and participation to education and instruction in a democratic society. (ATTR: ARTS)

#### **\*\*\*EDUC—225. Historical and Sociological Foundations of Western Education 3 credits**

This course provides the student with an historical perspective as an aid to understanding contemporary education. It will deal with major educational ideas beginning with ancient Greece and continuing to modern

times. It seeks to show the close relationship between education and political, social, and economic forces as well as to develop the impact of science on education. (ATTR: ARTS)

\*\*\*EDUC—230. Philosophy of Education 3 credits

In this course, each student will be required to read a variety of texts representing contrasting educational philosophies. The purpose of the course is to promote awareness of the existence of numerous philosophies of education, to demonstrate the practical educational implications derived from each theory, and to assist each student in the formulation of an educational philosophy suitable to the needs of his/her professional and/or personal life. (ATTR: ARTS)

EDUC—260. Educational Psychology 3 credits

This course is intended to help the prospective teacher interact effectively in the social-learning environment that is established between student and teacher and among students in group and individualized settings. The focus is theoretical as well as applied. Emphasis is on establishing a foundation for making sound and informed educational decisions based on the body of knowledge that pertains to teaching and learning within the framework of human development. Differences between the middle school and high school populations will be explored. As an outcome of the course, the prospective teacher should be able to apply knowledge of the learner, the learning process, and the learning setting to create an environment that offers a diverse student population the greatest opportunity to learn. A twenty-hour field experience is required (transportation is the responsibility of each student). For students pursuing Siena's certification sequence, the field experience must be at the secondary level (grades 7-12). Prerequisite: EDUC—210 or permission of the Department of Education Chair. Sophomores or above. (ATTR: ARTS)

EDUC—261. Foundations of Language and Literacy 3 credits

The acquisition and development of language is examined as the foundation of literacy. Three populations are studied: native English speakers with intact abilities and with impairments; speakers whose dominant language is not English; and speakers of variants of English. Children and early adolescents are viewed as applying cognitive strategies actively in processing spoken language and in deriving meaning from print. Topics include environmental influences on language and literacy, discourse theory, pragmatics, participation structure, literacy at home and in school, use of writing and of literature to enhance learning, and the impact of technology on literacy. A twenty-hour field experience is required (transportation is the responsibility of each student). For those pursuing Siena's certification sequence, the field experience must be at the secondary level (grades 7-12) in a "high needs" school. Prerequisite: Educational Psychology (EDUC—260); or General Psychology (PSYC—100); or permission of the Department of Education Chair. Sophomores or above. (ATTR: ARTS)

EDUC—310. Topics in Education 1 - 3 credits

This course provides the opportunity to explore changing trends and challenges in America's schools, to address current issues affecting education, educational issues on the national agenda, state and national initiatives, and/or important developments in areas such as curriculum, instruction, urban education, assessment, or technology. The topic is one not normally investigated in depth in existing courses. This course may be taken more than once with different content. Offered as needed. 1 to 3 credits, depending on the topic. (ATTR: ARTS)

\*\*\*EDUC—350. An Introduction to Educational Research 3 credits

The purpose of this course is to explore the area of educational research. Emphasis will be placed upon the attitude as well as the function of research, including the principles, methods, and strategies useful in planning, designing, and evaluating studies of education. Students will plan, design, and prepare a proposal that incorporates principles of research. The proposal will, when the opportunity permits, be translated into an empirical study. (ATTR: ARTS)

EDUC—360. Adolescence and Schooling 3 credits

Students will review narrative accounts of the school experiences of adolescents from diverse backgrounds. Their first task will be to consider how narrative, empirical, and theoretical knowledge provide different perspectives on understanding the school lives of adolescents. Then, they will examine how cultural canons about adolescence influence the many ways that young people live out their lives in school. They will review and interpret narrative accounts of schooling through fiction, autobiography, movies and self-reflection about adolescence. Students will not be "given the answers" or told what to think about adolescence and schooling. Rather, readings and class presentations will provide them with information and theoretical points of view which sometimes conflict. Ultimately, they will be asked to examine these multiple perspectives to create their own way of viewing adolescents in school settings. A twenty-hour field experience at the middle school or junior

high school level is required (transportation is the responsibility of each student). Prerequisite: EDUC—260 (Educational Psychology); or permission of the instructor. (ATTR: ARTS)

EDUC—365. Exceptional and At-risk Learners 3 credits

This course is intended to serve as an introduction to the study of exceptional children. Students in the course will become familiar with the broad range of exceptionalities from giftedness to retardation. While the main focus will be education of the exceptional person, emphasis will also be placed upon social and legal considerations. The course is recommended for those who are interested in regular classroom teaching as well as special education and school psychology or social work. A twenty- hour field experience working with children who have special needs is required (transportation is the responsibility of each student). Prerequisite: EDUC—260 and sophomore standing, or permission of the Department of Education Chair. (ATTR:ARTS)

EDUC—385. Teaching and Learning in the Middle School 3 credits

The major focus of this course will be on the nature, needs, and characteristics of the adolescent learner, as well as the philosophy, curriculum, and pedagogy (including methods and materials) appropriate for middle-level education in New York State. This course will address diverse instructional strategies, including interdisciplinary teaching, teaming, and cooperative learning. Successful middle-level educational programs, which focus on and promote both the intellectual and personal development of the early adolescent, will be examined. A twenty-hour field experience is required at the middle school or junior high school level (transportation is the responsibility of each student). Prerequisite: EDUC—260 or permission of instructor. (ATTR: ARTS)

EDUC—461. Literacy and the Reflective Practitioner (Lecture) 3 credits

This course, which accompanies clinical practice, is designed to address current issues and practices in literacy development in the content areas at the middle and high school levels, and assists prospective teachers in reflecting upon and improving their student teaching experience. Emphasis is on the responsibility of teachers of all subjects to create a literate environment in their classroom and to develop the literacy skills of students of all ability levels as well as of students who are English language learners. Specific instructional strategies will be explored that enable teachers to engage learners actively with course content, to enhance critical thinking skills and expression of ideas, to promote metacognitive skills and study skills, and to develop critical skills in evaluating sources of information. Special topics, including the utilization of technology and assistive technology to further learning and working with students from diverse backgrounds and with differing abilities will be stressed. Prerequisite: Admission to the Professional Sequence. (ATTR:ARTS)

EDUC—462. Literacy and Reflective Practitioner (Laboratory) 1 credit

EDUC—481. Instructional Theory & Practice in Inclusive Classrooms (Lecture) 3 credits

This course, which considers the theory and practice of effective instructional practices in diverse classrooms, will focus on the components of instruction and will be practice-oriented and performance-based. Additionally, this course provides prospective teachers with a framework to help them reflect on and improve their student teaching experience. Consequently, students will study Danielson's Framework for Teaching and use it to analyze their success within the four domains of planning and preparation, classroom environment, instruction, and professional responsibilities. Emphasis will be given to the understanding and application of the New York State Student Learning Standards in inclusive subject area classrooms. Such topics as unit planning and lesson planning, motivation, inclusion, diversity, teacher expectations, questioning skills, feedback strategies, methodology, technologies, and evaluation and assessment will be studied. The prospective teacher will develop and practice behaviors and strategies characteristic of effective teaching. Attention will be given to ways to place middle and high school students in more active roles as learners. Students pursuing Siena's teacher certification program will be required to successfully complete a forty-hour field experience in inclusive classrooms at the secondary level (grades 7-12). This course is available for all areas of certification. It is open to students seeking certification in French or Spanish in the fall semester only; in Business Marketing in the fall semester only; in Biology, Chemistry, and Physics in the fall semester only; and in Mathematics in the spring semester only. Prerequisites: EDUC—210, EDUC—260, EDUC—261, EDUC-365 and admission to the Professional Sequence. (ATTR:ARTS)

EDUC — 482. Instructional Theory & Practice in Inclusive Classrooms (Laboratory) 1 credit

EDUC—487. Clinical Experience in the Middle School 5 credits

This course will give the prospective teacher sustained experience in the middle school classroom. In addition to teaching, the student is expected to assume other professional responsibilities that are assigned to him/her by the cooperating teacher and/or principal. It is expected that student teachers will gradually add teaching responsibilities and assume a full teaching load. The student will return to the College for scheduled classes or seminars with the College staff. Co-requisite: EDUC—485. Prerequisites: EDUC—481 and admission to the Professional Sequence. Note: All students will be personally responsible for transportation arrangements. (ATTR: ARTS)

EDUC—488. Clinical Experience in the High School 5 credits

This course will give the prospective teacher sustained experience in the high school classroom. In addition to teaching, the student is expected to assume other professional responsibilities that are assigned to him/her by the cooperating teacher and/or principal. It is expected that student teachers will gradually add teaching responsibilities and assume a full teaching load. The student will return to the College for scheduled classes or seminars with the College staff. Co-requisite: EDUC—485. Prerequisites: EDUC—481 and admission to the Professional Sequence. Note: All students will be personally responsible for transportation arrangements. (ATTR: ARTS)

EDUC—495. Drug, Alcohol, & Tobacco Workshop 0 credits

This six-hour workshop is designed to provide the student with knowledge of physical and psychological addiction to controlled substances; chemical dependency; drugs of abuse; legal issues for teachers; behavioral indicators of substance abuse; goals of a school wide substance abuse prevention program; goals of a school wide intervention program; curriculum materials on decision-making, coping strategies, and self-esteem; issues of adolescence; and the continuum of services. Prerequisite: Enrollment in the Professional Semester. Fee required. (ATTR: ARTS)

EDUC—496. Child Abuse and School Violence Workshop 0 credits

This six-hour workshop is designed to provide the student with knowledge of the definition of abuse, maltreatment, and neglect according to NYS Family Court Act and Social Services Law; situations requiring reporting of suspected cases of child abuse maltreatment; a description of what constitutes reasonable cause to suspect child abuse or maltreatment; proper procedure for making a report of suspected child abuse; actions mandated reporters may take to protect a child in addition to filing a child abuse report; legal responsibilities in reporting that teachers have as care providers; legal protections afforded reporters and consequences for failing to report; distinctions among various behavioral and physical characteristics of abusive parents and caretakers; physical and behavioral indicators of physical abuse, maltreatment, and neglect; contrast between physical and behavioral indicators of sexual abuse; child abduction; and general principles for interviewing or interacting with child victims. The workshop also provides the training in School Violence Prevention and Intervention. Prerequisite: Enrollment in the Professional Semester. Fee required. (ATTR: ARTS)

\*\*\*EDUC—499. Independent Study in Education 1 - 3 credits

A qualified student may pursue a particular topic in Education by means of independent research, periodic discussion with the department member concerned, and the development of a satisfactory written report. Approval for independent study must be obtained from the Department Chair, and the student will be expected to comply with all College guidelines concerning such projects. (ATTR: ARTS)

## **English Department**

Chair: Dr. Erich Hertz, Assoc. Prof.

Prof.: Dr. Thomas F. Bulger, Dr. Pamela Clements, Dr. J. Gerard Dollar, Dr. Mary K. Fitzgerald-Hoyt,

Dr. Naton Leslie, Dr. Rachel Stein, Dr. Charles R. Trainor, Dr. Meg Woolbright

Assoc. Prof.: Dr. Chris Farnan, Dr. Chingyen Mayer, Dr. Lisa Nevárez

Asst. Prof.: Karin Lin-Greenberg, Dr. Todd Snyder, Dr. Keith M. Wilhite

As its principal mission the English Department seeks to foster an understanding of and appreciation for literature. To realize this mission, the department is committed to: teaching literature that represents the cultural diversity of our society; encouraging students to think critically and to express themselves clearly; extending our students' critical vocabulary and familiarity with literary history; and helping students integrate their Franciscan liberal arts education, by making them aware of the many links between literature and other fields.

In its major the department seeks to provide not only a strong background in American and English literary history but also a variety of approaches to literature — thematic, structural, generic, cultural, and gender-

related. Courses in advanced writing, oral communication, creative writing, and journalistic writing aim at developing thoughtful and creative self-expression. A program in English education prepares students for careers in teaching. A professional internship program provides students with practical experience in print and broadcast journalism, public relations, and other career possibilities. A series of honors seminars challenges our best students to explore — at an in-depth and scholarly level — particular writers or themes.

A final mission of the English Department is to enhance the cultural and intellectual climate of Siena College — through, among other things, encouraging scholarly research and publication by the English faculty, sponsoring a visiting artist series, advising a student literary club and journal, and supporting interdisciplinary programs.

English Honors Program: A program of seminars for outstanding students. The program is student centered, designed for those who seek an intellectually exciting, collaborative learning experience. Instruction is conducted in seminar format, with students encouraged to take an active role in determining the direction of the class. The seminars allow close communication and interaction between a small number of students and the faculty, enriching the learning process. Entering students are invited to join the Great Books seminar on the basis of their high school record and SAT scores. Upper division Honors Seminars are open to qualified students in any major with permission of the instructor. Students in any major who complete a minimum of four Honors seminars with an average of B+ or better, and maintain a cumulative index of at least 3.3, are eligible for a Certificate of Honors in English upon graduation.

**Requirements for the Major, B.A. in English ( 39.000 credits ):**

ENGL 200 Survey of English Literature I		3 cr.
ENGL 205 Survey of English Literature II		3 cr.
ENGL 213 Survey of American Literature		3 cr.

ENGL 011 Literary Perspectives	<b>OR</b>	
ENGL 090 Honors Great Books		3 cr.

English Electives		15 cr.
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English majors must also complete one course from each of the following sections:

**Period course in British or Irish Literature (LTIB) from:** 3 cr.

ENGL 240 Shakespeare  
 ENGL 300 Chaucer  
 ENGL 305 Elizabethan Literature  
 ENGL 310 English Renaissance Literature  
 ENGL 315 Literature of the Enlightenment  
 ENGL 320 Romantic Literature  
 ENGL 325 Victorian Literature  
 ENGL 330 Modern British Writers  
 ENGL 335 Irish Literary Revival  
 ENGL 340 Contemporary Irish Literature  
 ENGL 342 Contemporary British Culture

**Upper-level course in American Literature (LTAM) from:** 3 cr.

ENGL 345 Early American Literature (1500-1820)  
 ENGL 350 American Renaissance Literature (1820-1865)  
 ENGL 355 Realistic Movements in American Literature  
 ENGL 360 American Literature of the Jazz Age  
 ENGL 365 Atomic Literature  
 ENGL 368 Literature of the War in Vietnam  
 ENGL 370 African American Literature  
 ENGL 372 Native American Literature  
 ENGL 374 Asian American Literature  
 ENGL 376 Latino/a Literature  
 ENGL 378 Contemporary American Literature

**British or American Literature prior to 1820 (LTBA) course from:** 3 cr.

ENGL 240 Shakespeare

ENGL 300 Chaucer  
ENGL 305 Elizabethan Literature  
ENGL 310 English Renaissance Literature  
ENGL 315 Literature of the Enlightenment  
ENGL 320 Romantic Literature  
ENGL 345 Early American Literature (1500-1820)

**Special Topics (LTTP) course from:**

3 cr.

ENGL 210 Women in Literature  
ENGL 215 Sexuality in Literature  
ENGL 220 Literature and the Environment  
ENGL 222 Reading Film  
ENGL 225 Comedy  
ENGL 235 Science Fiction  
ENGL 236 Adolescent Literature  
ENGL 285 Topics in English

**Auxiliary (6.000 credits)**

Two semesters in the same foreign language. These languages include: French, Spanish, German, Latin, Russian, Greek, Italian, American Sign Language, or Arabic.

6 cr.

It is recommended that students take ENGL 200, ENGL 205, and ENGL 213 before the end of their sophomore year, if possible.

**B.A. in English (39.000 credits) with a Certification in English Education**

English majors seeking initial teaching certification in grades 7-12 will need to maintain at least a 3.15 in English as well as an overall GPA of 3.0.

ENGL 200 Survey of English Literature I 3 cr.  
ENGL 205 Survey of English Literature II 3 cr.  
ENGL 213 Survey of American Literature 3 cr.

It is recommended that students take ENGL 200, ENGL 205, and ENGL 213 before the end of their sophomore year, if possible.

ENGL 011 Literary Perspectives OR 3 cr.  
ENGL 090 Honors Great Books 3 cr.

ENGL 240 Shakespeare \* 3 cr.  
ENGL 236 Adolescent Literature \* 3 cr.

\*ENGL 236 will satisfy the LTTP requirement. ENGL 240 may satisfy either the LTIB or LTBA requirement, but not both.)

**British or American Literature prior to 1820 course (LTBA) from:**

3 cr.

ENGL 240 Shakespeare  
ENGL 300 Chaucer  
ENGL 305 Elizabethan Literature  
ENGL 310 English Renaissance Literature  
ENGL 315 Literature of the Enlightenment  
ENGL 320 Romantic Literature  
ENGL 345 Early American Literature (1500-1820)

**Upper-level course in American Literature (LTAM) from:**

3 cr.

ENGL 345 Early American Literature (1500-1820)  
ENGL 350 American Renaissance Literature (1820-1865)  
ENGL 355 Realistic Movements in American Literature  
ENGL 360 American Literature of the Jazz Age  
ENGL 365 Atomic Literature  
ENGL 368 Literature of the War in Vietnam  
ENGL 370 African American Literature  
ENGL 372 Native American Literature

ENGL 374 Asian American Literature  
ENGL 376 Latino/a Literature

**English Education Major Auxiliary ( 12.000 credits )**

WRIT 220 Oral Communication 3 cr.  
WRIT 230 History of the English Language 3 cr.

Two semesters ( 6 credits ) in the same foreign language  
These languages include: French, Spanish, German, Latin,  
Russian, Greek, Italian, American Sign Language or Arabic. 6 cr.

**In addition to these requirements, students must complete the Education Certificate.  
Please see the Education Department for specific requirements.**

**It is recommended that students take one of the following:**

ENGL 310 Early Modern Literature  
ENGL 315 Literature of the Enlightenment  
ENGL 320 Romantic Literature  
ENGL 345 Early American Literature (1500-1820)

**Also, students who plan to attend graduate school are recommended to take:**

ENGL 400 Literary Criticism

**Requirements for the Minor, English (18.000 credits):**

English Electives 18 cr.

**Requirements for the Minor, Writing and Communication (18.000 credits):**

6 courses in Writing 18 cr.

### Description of Courses

The English core requirement is satisfied with ENGL—011, ENGL—090, or transfer credit for literature courses. ENGL—011 (or ENGL—090) is a prerequisite for all of the ENGL courses. Transfer students may be allowed to satisfy the core requirement with Siena upper level literature courses. See English Honors Program section for additional listings.

ENGL—011. Literary Perspectives 3 credits

This course offers students practice in critical thinking, reading, responding to, and analyzing a wide variety of literature. Because the course is writing-intensive, students will gain experience in writing and revising critical essays about literature. Readings will include literature from diverse classic and contemporary authors, as well as various literary genres. (ATTR: ARTS, CDE)

ENGL—051. Greek Literature in Translation 3 credits

See CLSS—220 for course description. (ATTR: ARTS, CAL,CFH)

ENGL—055. Latin Literature in Translation 3 credits

See CLSS—225 for course description. (ATTR: ARTS, CAL, CFH)

ENGL—200. Survey of English Literature I 3 credits

An introduction to English literature from Beowulf to Swift, presented in cultural context, tracing the development of literary genres, such as the epic, the sonnet, and prose fiction. (ATTR: ARTS)

ENGL—205. Survey of English Literature II 3 credits

This course introduces students to English language prose, poetry, and other diverse forms of cultural expression of the Romantic, Victorian, Modern, and Contemporary periods. Students will analyze these works in the context of social, historical, and political changes that affected English and Anglophone literary production after the close of the eighteenth century. (ATTR: ARTS)

ENGL—210. Women in Literature 3 credits

This course is a study of women's various roles in literature from classical to modern times. Novels, short stories, poems, dramas, biographies and autobiographies across cultures and class emphasize the evolving image of women and the role of women as writers of literature. (Same as WSTU—210) (ATTR: ARTS, CAL, CFD, LTTP, WSTU)

ENGL—213. Survey of American Literature 3 credits

This course is an historical survey of American literature from the pre-colonial period through the twenty-first century. Covering a broad range of significant American authors, the course will examine writers within an historical and cultural context. (ATTR: AMSC, ARTS)

ENGL—215. Sexuality in Literature 3 credits

This course examines the treatment of sexuality in significant British and American literature. Readings include fiction, drama, and poetry that centers upon issues of sexuality such as censorship and freedom of expression, religion and sexuality, formations of heterosexuality and homosexuality, power and desire, social regulation of sexual expression, sexual violence, and AIDS. Authors may include: D.H. Lawrence, Jean Rhys, Margaret Atwood, Alice Walker, Peter Shaffer, Harvey Fierstein, James Baldwin and others. (Same as WSTU—215) (ATTR: ARTS, CAL, CFD, LTTP, WSTU)

ENGL—220. Literature and the Environment 3 credits

This course introduces students to the tradition of nature writing in literature, with an emphasis on American authors. Thoreau's *Walden* is a central text. Particular attention is given to contemporary multicultural voices among environmental writers. The course emphasizes nonfiction prose but includes some poetry and fiction. (Same as ENVA—220) (ATTR: ARTS, LTTP)

ENGL—222. Reading Film 3 credits

This course examines film as a textual form and attends to the formal and political dynamics of the history of film. By focusing on a director or a theme, students will learn how to analyze film and how to formulate arguments about film informed by cultural studies and film theory. The course will mostly be devoted to how we understand the textual elements of cinema: narrative, symbolism, characterization, and plot. However, it will also examine how that content is reflected in the technical formal elements of cinema: cinematography, mise en scene, editing, and sound. (ATTR: ARTS, LTTP)

ENGL—225. Comedy 3 credits

This course will explore the comic impulse in a range of literary genres and may include classical Greek modes, the Shakespearian tradition, as well as modern and contemporary versions. It will consider "comedy" in both of its typical meanings: (1) as a literary genre in which conflicts are successfully resolved through acts of reconciliation and harmony, and (2) as humor. The course will investigate the sometimes paradoxical relation between these two definitions. Some forms of comedy may not seem to us particularly funny, yet fulfill the traditional generic requirement of ending well. Other instances of the comic contain elements that make us laugh, but the overall effect may be distressing or disharmonious. The class will also consider comedy in relation to its traditional generic foil, tragedy, discovering perhaps a surprising number of connections between these two presumably opposite modes. While some discussions will focus on what comedy offers us in terms of understanding – or enduring – the human condition, the course will also examine the cultural and historical dynamics of comedy, including issues of economics and class, gender and sexuality, as well as race and region. Authors may include Aristophanes, Shakespeare, Austen, Wilde, and Heller. A number of films may also be analyzed. (ATTR: ARTS, LTTP)

ENGL—235. Science Fiction 3 credits

This course will examine the category of literature usually designated as Science Fiction, SF, or Speculative Fiction. Science Fiction, in all its forms, is essentially a literature of ideas, in which the "facts" of current reality are altered in some way to answer the question "What if?" The course will consider these questions: How is Science Fiction defined? Where does Science Fiction begin? (With Verne and Wells, with Shelley's *Frankenstein*, or even earlier?) How is the literary category of Fantasy to be distinguished from Science Fiction? How do we evaluate the aesthetics of Science Fiction? Readings will include novels and short stories by authors such as H.G. Wells, Arthur C. Clarke, Isaac Asimov, Ursula LeGuin, Philip K. Dick, Octavia Butler, Samuel Delaney, William Gibson, and others. (ATTR: ARTS, CAL, LTTP, MINR)

ENGL—236. Adolescent Literature 3 credits

This course is designed for students pursuing the English/Education certificate. The main goal of the course is to familiarize students with the genre of adolescent literature. Students are required to write critical response

papers and to lead class discussions. A final project, involving the creation of a literature unit appropriate for a middle school classroom, is required. (ATTR: ARTS, LTTP)

ENGL—240. Shakespeare 3 credits

A study of several major Shakespearean plays. The works will be analyzed against the background of Shakespeare's life and times. (ATTR: ARTS, LTBA, LTIB)

ENGL—250. The Drama 3 credits

A study of representative dramatic types designed to increase appreciation of the drama as literature. Attention is paid to the historical development of the genre. (ATTR: ARTS, CAL, CFH)

ENGL—253. The Short Story 3 credits

This course examines the short story as a distinct, culturally diverse literary genre. By reading a variety of short fiction, students will learn the history, the artistry, and the versatility of the genre. Special emphasis will be given to critical reading and writing skills. (ATTR: ARTS, CAL, CFD,)

ENGL—256. The Novel 3 credits

A study of selected novels designed to increase appreciation of the genre. Works from the nineteenth century to the present will be read with emphasis placed on the techniques and purposes of the authors. (ATTR: ARTS, CAL, CFH)

ENGL—259. Poetry 3 credits

An introduction into the nature of poetic experience. Technical and structural factors of poetry will be studied in order to deepen appreciation of the genre. (ATTR: ARTS, CAL)

ENGL—285. Topics in English 3 credits

This course will explore literary topics not normally treated in regular English courses. Specific topics will be announced during the semester previous to that in which the course will be offered. May be taken twice with different topics. An additional fee may be required, depending on the topic offered. (ATTR: ARTS, LTTP)

ENGL—300. Chaucer 3 credits

An in-depth study of Chaucer's major work, *The Canterbury Tales*, along with selections from his other works. The literature will be discussed in the context of important issues of medieval times: the growing middle class, the position of women, the aftermath of war and plague, religious crisis and reform. All readings will be in Middle English. (ATTR: ARTS, LTBA,LTIB)

ENGL—305. Elizabethan Literature 3 credits

Students will explore compelling issues of the era of Queen Elizabeth I such as: images of the self, the myth of the Golden Age, and the controversy over gender roles. Readings will be selected from writers such as Sir Thomas More, Edmund Spenser, Philip and Mary Sidney, and Queen Elizabeth. (ATTR: ARTS, CAL, LTBA, LTIB, CFH)

ENGL—310. English Renaissance Literature 3 credits

Students will explore compelling issues of the era such as: magic, science, and witchcraft; the New World; the African slave trade; early feminism; and the struggle for religious, political, and social freedom. Readings will be selected from writers such as John Donne, George Herbert, Aemilia Lanyer, John Milton, and Mary Wroth. (ATTR: ARTS, CAL, LTBA, LTIB, CFH, REB)

ENGL—315. Literature of the Enlightenment 3 credits

This survey of the poets and prose writers of the neo-classical movement may include the works of Dryden, Swift, Pope, Johnson, and Boswell, and one or two novelists of the period. (ATTR: ARTS, LTBA, LTIB, REB)

ENGL—320. Romantic Literature 3 credits

This course examines English language literature and culture from the late eighteenth to early nineteenth centuries, and allows students to explore themes related to this time of revolutionary change and political and social upheaval. Bracketed by the end of the Enlightenment, as well as the French Revolution, and the start of the Victorian Era, the Romantic period witnessed the emergence of new literary approaches that emphasized nature, the individual, and the imagination. Works by authors such as Austen, Baillie, Blake, Byron, Coleridge, Keats, the Shelleys, and Wordsworth may be included. (ATTR: ARTS, LTBA, LTIB)

ENGL—325. Victorian Literature 3 credits

This course examines English literature from the 1830s to the turn of the 20th century. Through critical reading and writing assignments, students will explore such themes as Industrialization, the Impact of Empire, Self and Society, Childhood, and the Role of Women. Works by such authors as Tennyson, Elizabeth Barrett Browning and Robert Browning, Dickens, Lewis Carroll, Wilde, and the Brontes will be included. (ATTR: ARTS, LTIB)

ENGL—330. Modern British Writers 3 credits

This course considers the evolution of British literature in the early to mid-20th century in the wake of a collapsing Empire and two World Wars. The innovative, experimental modes of expression of Modernism, disillusionment with Victorian values, changing attitudes toward gender and sexuality, and the redefinition of British identity will be explored through such writers as Conrad, Lawrence, Woolf, Mansfield, West, Ford, and Maugham. (ATTR: ARTS, LTIB)

ENGL—335. Irish Literary Revival 3 credits

An exploration of the controversial movement that sought to affirm a uniquely Irish culture through reviving Irish myth, encouraging the use of the Irish language, and founding an Irish national theater. Beginning with the catastrophic Potato Famine in the mid-1880s, the course will examine Irish writers' attempts to carve out an independent cultural niche in the late 19th and early 20th centuries. Writers to be considered will include W.B. Yeats, Lady Gregory, J.M. Synge, Sean O'Casey, and James Joyce, and issues of the changing roles and representation of Irish women as well as the imaginative construction of an Irish nation will be addressed. (ATTR: ARTS, LTIB)

ENGL—340. Contemporary Irish Literature 3 credits

This course considers recent Irish writing in the context of the historical, political, religious, economic, and cultural influences that have shaped that literature. Readings will be drawn from a variety of backgrounds and genres, and may include works by William Trevor, Conor McPherson, Eavan Boland, Nuala Ní Dhomhnaill, and Brian Friel. (ATTR: ARTS, LTIB)

ENGL—342. Contemporary British Culture 3 credits

This course examines British culture from the postmodern and contemporary era. By drawing on historic, political, and aesthetic concerns, this class may consider multiple genres of literature, but also emphasize how other arts shape what it means to have a British identity. Film, visual arts, popular music, and other cultural productions may be studied as primary or secondary sources in order to bolster a broader sense of how to understand the role of Britishness in the contemporary world. Readings will be taken from a variety of backgrounds and may include authors from the United Kingdom or Anglophone writers who reflect on the sordid legacy of the British Empire. (ATTR: ARTS, LTIB)

ENGL—345. Early American Literature: Encounters, Enlightenment and Election (1500-1820) 3 credits

Early American Literature examines the origins and developments of the American literary traditions from the period of European expansion through the establishment of the early American republic. Students may read authors such as Bradford, Jefferson, Knight, Sedgwick, Cooper, Adams, Rowson, and Brown. (ATTR: ARTS, AMSC, LTAM, LTBA, REB)

ENGL—350. American Renaissance Literature: Solitude and Society (1820-1865) 3 credits

American Renaissance Literature examines the emergence of the American narrative, the American character, and the development of the Transcendentalist and Romantic literary movements. Close attention will also be paid to abolitionist writing, slave narrative, and the establishment of the American woman writer against the background of the expanding nation. Students may study such authors as Irving, Cooper, Jacobs, Emerson, Thoreau, Hawthorne, Poe, Fuller, Fern, Stowe, Douglas, Melville, Sedgwick, Whitman, or Kirkland. (ATTR: ARTS, AMSC, LTBA, LTAM)

ENGL—355. Realistic Movements in American Literature: Realism, Regionalism, and Naturalism (1865-1915) 3 credits

This course examines the development of the realistic impulse in America from the close of the Civil War to WW I. Texts will be examined within the context of the American transformation from an agrarian republic to an industrial world power. Students may read authors such as Twain, James, Chopin, Jewett, Freeman, Crane, Wharton, Zitkala Sa, Sui Sin Far, Harper, Dreiser, and Norris. (ATTR: ARTS, AMSC, LTAM)

ENGL—360. American Literature of the Jazz Age 3 credits

This course will examine literary works written primarily during the 1920s, a period of intense cultural freedom as well as restraint within the United States. On the one hand, this was the heyday of flappers and speakeasies; on the other hand, the Jazz Age was darkened by the historical trauma of the First World War as well as the

economic hardships of The Crash of 1929 and the impending Great Depression. We will discuss the contributions of the “Lost Generation” of American expatriate authors in Paris and witness the cultural flowering of the Harlem Renaissance. Readings may include fiction by Willa Cather, F. Scott Fitzgerald, Ernest Hemingway, and William Faulkner; poetry by Gertrude Stein, T. S. Eliot, Countee Cullen, Langston Hughes, and e.e. cummings; and drama by Eugene O’Neill. To give a fuller sense of both the era and its literature, we may also explore other cultural media of the “Roaring Twenties,” such as experimental painting, silent film, blues music, and of course jazz. (ATTR: ARTS, AMSC, LTAM)

ENGL—365. Atomic Literature 3 credits

This is a multi-genre survey of American Literature produced during the Cold War period, especially the 1950s, 1960s and early 1970s. In what ways did living under the shadow of atomic and nuclear weapons change modern American culture, and how did the literature of this period reflect as well as critique these Cold War conditions? Authors may include: Kurt Vonnegut, John Barth, Sylvia Plath, Gwendolyn Brooks, Adrienne Rich, and Ishmael Reed, as well as popular culture materials, such as the Western, the spy thriller, and Bob Dylan’s protest music. (ATTR: ARTS, AMSC, LTAM)

ENGL—368. Literature of the War in Vietnam 3 credits

This course will examine the American War in Vietnam (1965-1975) through major literary works written by both American and Vietnamese authors. Emphasis is placed on situating the literature within the historical context. (ATTR: AMSC, ARTS, CAL, LTAM, MCCP)

ENGL—370. African American Literature 3 credits

This course is an historical survey of African American literature which introduces students to a broad range of significant writers in the genres of poetry, prose, autobiography, fiction and drama. (ATTR: ARTS, CAL, CFJ, LTAM, MULT, LTIB)

ENGL—372. Native American Literature 3 credits

This course surveys Native American creation myths, oral history, poetry and prose by such authors as Black Elk, N. Scott Momaday, Louise Erdrich, James Welch, Leslie Marmon Silko, Sherman Alexie and Linda Hogan. Students will study the literature within its cultural and historical context. The course may include films, guest lectures and a field trip. (ATTR: ARTS, MULT, AMSC)

ENGL—374. Asian American Literature 3 credits

This course surveys the development of Asian American literature within the context of different Asian and Asian American cultural and historical traditions, and dominant American literary, racial, and political discourses. Students will read a wide array of literary, theoretical, and critical works by Asian American writers. Same as MULT—345. (ATTR: ARTS, CAL, CFD, AMSC, LTAM, MULT)

ENGL—376. Latino/a Literature 3 credits

This course surveys Latino/a literature written in English. Students will be introduced to Latino/a poetry, fiction, drama and nonfiction prose. Latino/a literature will be examined within the context of American literature, and as a unique literary movement. Attention will be given to historical and social contexts and their impacts upon Latino/a literary tradition. Same as MULT—335. (ATTR: ARTS, CAL, AMSC, LTAM, MULT, CFD)

ENGL—378. Contemporary American Literature 3 credits

This is a multi-genre survey of American literature produced in the contemporary period (1980s to the present). We will examine literary texts in their historical, social and aesthetic contexts, exploring the various ways American literature responds to the complexities of race, class, gender, and sexuality in contemporary society. In part, this means thinking about American literature in an increasingly postmodern, multicultural, global context. Course readings will draw from a diverse range of contemporary American authors. Reading selections will vary, but could include works by: Sherman Alexie, T.C. Boyle, Raymond Carver, Junot Diaz, Don DeLillo, Louise Erdrich, Jeffrey Eugenides, Jonathan Franzen, Jorie Graham, Gish Jen, Edward P. Jones, Jhumpa Lahiri, Chang-rae Lee, Cormac McCarthy, Toni Morrison, Sharon Olds, Philip Roth, Kay Ryan, Paula Vogel, and August Wilson. (ATTR: AMSC, ARTS, ASLT, LTAM)

ENGL—400. Literary Criticism 3 credits

This course offers students an opportunity to examine literary theory in detail and to apply it to selected texts. Students may study a range of critical approaches, such as New Historicism, Postcolonial theory, and Cultural Studies. Prerequisite: 12 hours of ENGL credits. Permission of instructor required. (ATTR: ARTS)

ENGL—480. Internship in English 1 - 3 credits

This course enables students to earn academic credit while gaining work experience in broadcast and print media, public relations, and other communications fields. Interns must complete 120 hours of on-site work as well as fulfilling the academic components of the course, including regular written assignments. Evaluation will be conducted by the Department Internship Director in consultation with the worksite supervisor.

The internship is open to Junior and Senior English majors and minors or Writing minors who have completed at least 12 hours in English and/or Writing and have an index of at least 3.0 in those courses. Permission of the Internship Director is required for admission to the course. (Same as WRIT—480.) (ATTR: ARTS, INT)

ENGL—499. Independent Study 1 - 3 credits

Students may design a course of study in consultation with a faculty member. This topic, including bibliography, must be submitted in writing and approved by the professor and the department chair. May be repeated twice with different topics, for up to 6 credits. (ATTR: ARTS)

ENGL—790. Washington Semester Journalism Seminar I 4 credits

The Washington Journalism Semester provides a seminar which offers an intensive scrutiny of the gathering and presentation of news. Reporters, news executives, news sources, and others share their ideas and experiences. Students study the workings of large and small newspapers and broadcast news bureaus. Meetings are generally four to six times per week and may be held at field sites as well as on campus. (See: ATDV—789) (ATTR: ARTS)

ENGL—791. Washington Semester Journalism Seminar II 4 credits

This is a correlated course to the work being carried on in ENGL—790. (See: ATDV—789) (ATTR: ARTS)

### **English Honors Program**

Permission of the instructor is required prior to enrolling in any Honors Seminar. The topics vary from year to year, which allows the student to repeat Honors courses with different subject matter.

ENGL—090. Great Books Seminar 3 credits

This is a student-centered course, designed for those who seek an intellectually exciting, collaborative learning experience. Instruction is conducted in seminar format, with students encouraged to take an active role in determining the direction of the class. Students will meet weekly to discuss classic literary works of the Western tradition, such as Homer's *Odyssey* and Shakespeare's *Much Ado about Nothing*, as well as contemporary multicultural works. (ATTR: ARTS, CDE, HNRS)

### **Writing Courses**

WRIT—100. Introduction to Writing 3 credits

The purpose of this course is to teach students what writing is and to assist them in writing clear, coherent prose. The approach is process oriented, emphasizing multiple drafts, peer critique and revision. A research paper is required in this course. (ATTR: ARTS, WRIT)

WRIT—200. Advanced Writing 3 credits

The purpose of this course is to teach students to develop and refine a sophisticated writing style. The approach is process-oriented, emphasizing multiple drafts, peer critique and revision. (ATTR: ARTS, WRIT)

WRIT—220. Oral Communication 3 credits

Introducing students to basic theories and concepts about communication, this course explores how verbal and nonverbal communication operates in public and private settings in relationship to gender, culture and class. Students develop skills in active listening, public speaking, interviewing, oral interpretation, providing feedback, and conflict resolution. (ATTR: ARTS, WRIT)

WRIT—230. History of the English Language 3 credits

A survey of the development of the English language from its origins as an Indo-European dialect to modern British and American English. The course will also examine regional, ethnic, and national varieties of English as well as current social and political issues regarding contemporary English. (ATTR: GSHU)

WRIT—240. Peer Tutoring in Writing 3 credits

The purpose of this course is to teach students how to tutor others in writing. The major emphasis of the course is on writing: analyzing your own writing processes while learning to talk to others about theirs. This course is required for anyone who wants to be a Writing Center tutor.

WRIT—320. Journalistic Writing 3 credits

An introduction to the basic techniques of journalistic writing. Among the areas covered are: conducting interviews, researching news stories, examining categories of journalistic writing, journalistic ethics. (ATTR: ARTS, WRIT)

WRIT—340. Writing Short Fiction 3 credits

This course will use peer evaluation and the traditional writing workshop to foster student skills in writing short fiction. Students are required to distribute stories they have written to class for critique and group evaluation. The works of contemporary writers will be studied with an eye toward formal concerns and techniques. Students will be introduced to the art of contemporary short fiction writing. (ATTR: ARTS, WRIT)

WRIT—360. Writing Poetry 3 credits

This course will use peer evaluations and the traditional writing workshop to foster student skills in writing poetry. Students are required to distribute poems they have written to the class for critique and group evaluation. Poetic theory and technique will be examined, and the works of contemporary poets will be studied. Students will be introduced to the art of writing contemporary poetry. (ATTR: ARTS, WRIT)

WRIT—390. Topics in Writing 3 credits

This course will explore writing topics not usually offered as part of the regular curriculum. Specific topics will be announced during the semester previous to the one in which the course will be offered. The course may be taken twice with different topics. (ATTR: ARTS, WRIT)

WRIT—480. Internship in Writing 3 credits

See ENGL—480 for course description. (ATTR: ARTS, INT)

WRIT—499. Independent Study 1-3 credits

Students may design a course of study in consultation with a faculty member. This topic, including a bibliography, must be submitted in writing and approved by the professor and the department chair. May be repeated twice with different topics, for up to 6 credits. (ATTR: ARTS, WRIT)

## **History Department**

Chair: Dr. James C. Harrison, Prof.

Prof.: Dr. Karl K. Barbir, Dr. Bruce W. Eelman, Dr. Karen W. Mahar

Assoc. Prof.: Dr. Jennifer H. Dorsey, Fr. Daniel Dwyer, O.F.M.,

Dr. Robert Nii Nartey, Dr. Wendy Pojmann

Asst. Prof.: Dr. Tim Cooper, Dr. Karen Sonnelitter

Visiting Asst. Prof.: Dr. Mara Drogan, Dr. Kimberly Lamay

The Department of History introduces students to the rich heritage of Western, American and other civilizations. The Department seeks to aid students in understanding both continuity and change: the complex, rapid changes of our times and their roots in and continuity with the past. History, while utilizing some of the methods of the social sciences, is humanistic in its approach and strives to integrate all past human experience. The Department attempts to foster the essential skills of the historian: scholarly inquiry and critical thinking, analysis, synthesis, narrative, and effective oral and written communication. It aims to prepare students for both advanced professional training and for careers as diverse as teaching, law, government, journalism, and business. To accomplish these purposes, students are offered a wide variety of courses in every area of history as well as specialized colloquia, honors seminars, and independent study. Additionally, to enhance appreciation for the craft of the historian in society, all majors must complete an experiential requirement involving participation in a historian-related activity outside the normal Siena classroom.

History Honors Program: Students with high academic achievement, regardless of their major, are invited to participate in Honors seminars. Freshmen are chosen on the basis of SAT scores and their high school record. Students who maintain a cumulative index of 3.3 and complete a minimum of four Honors seminars with a B+ average will be eligible for a certificate of Honors in History upon graduation. Admission to the seminars is by permission of the department head.

High school students who score 4 or better on Advanced Placement tests in Modern European or American history shall receive School of Liberal Arts elective credit.

### **Requirements for the Major, B.A. in History (39.000 credits):**

HIST 101 - Shaping of the Contemporary World

**OR**

HIST 190 - Level One Honors Seminar		3 cr.
HIST 110 - History Outside the Classroom		0 cr. (1 course)
*HIST 201 - West and World I		3 cr.
*HIST 202 - West and World II		3 cr.
*HIST 203 - American History I		3 cr.
*HIST 204 - American History II		3 cr.
<p>*Students may opt out of HIST – 201, 202 sequence, and replace those courses with 6 hours in European or non-European/non-U.S. history above 200 level (HEUR and HNW attributes); or, they may opt out of HIST – 203, 204 sequence, and replace those courses with 6 hours of U.S. history above 200 level (HAM attributes)  <i>Students must take at least one of the sequences, HIST – 201 AND HIST – 202 OR HIST – 203 AND HIST – 204, but can choose to take both sequences. Students should consult with their advisor on their course selection.</i></p>		
HIST 497 - Proseminar for Capstone		3 cr.
<p>The course normally is taken the semester preceding enrollment in HIST—499 in the senior year. It cannot be taken concurrently with HIST—499.</p>		
HIST 499 - History Capstone		3 cr.
6 credits in European history (HEUR)	<b>AND</b>	6 cr.
6 credits in non-European/non-U.S. history (HNW)	<b>AND</b>	6 cr.
6 credits in History electives		6 cr.
<p><b>Auxiliary ( 6.000 credits )</b>  Two semesters in the same foreign language  These languages include: French, Spanish, German, Latin, Russian, Greek, Italian or Arabic.  *American Sign Language does not fulfill this requirement.</p>		
<p><b>Requirements for the Minor, History (18.000 credits):</b>  HIST 101 - Shaping of Contemporary World      <b>OR</b>  HIST 190 - Level One Honors Seminar</p>		
		3 cr.
<p>6 credits in one of the following areas:  American history (HMAM)  European history (HMEU)  Non-European/non-U.S. (HNW)</p>		
		6 cr.
3 history elective courses		9 cr.
<p><b>B.A. in History (39.000 credits)  with Certificate in Social Studies Teaching</b>  History majors seeking initial teaching certification in grades 7-12 will need to maintain at least a 3.1 in History as well as an overall GPA of 2.9.</p>		
HIST 101 - Shaping of the Contemporary World	<b>OR</b>	
HIST 190 - Level One Honors Seminar		3 cr.
HIST 110 - History Outside the Classroom (credit received upon successful completion of student teaching)		0 cr. 1 course
HIST 201 - West and World I		3 cr.
HIST 202 - West and World II		3 cr.
HIST 203 - American History I		3 cr.
HIST 204 - American History II		3 cr.
HIST 497 - Proseminar for Capstone The course must be taken before HIST—499 . It cannot be taken concurrently with HIST—499.		3 cr.
HIST 499 - History Capstone		3 cr.

HIST 327 - New York State History	<b>OR</b>	
HIST 328 – Dutch Roots of New York		3 cr.
Any HIST course with an American (AMSA) designation beyond HIST 203 and 204		3 cr.
3 hours in non-European/non-U.S. History		3 cr.
3 hours in European History (must not be Ancient History)		3 cr.

History Electives 6 cr.

**Auxiliary (15.000 credits)**

3 hours in Economics		3 cr.
POSC 100 - Contemporary U.S. Politics		3 cr.
3 hours in Sociology		3 cr.

Two semesters ( 6 credits ) in the same foreign language  
 These languages include: French, Spanish, German, Latin, Russian, Greek, Italian or Arabic. 6 cr.  
 American Sign Language does not fulfill this requirement.

In addition to these requirements, students must complete the Education Certificate.  
 Please see the Education Department for specific requirements.

**Description of Courses**

HIST—101, The Shaping of the Contemporary World, fulfills the College core requirement of three hours in History, and is the prerequisite for all other courses in the department. Selected students may satisfy the core requirement with Level One History Honors. Transfer credits in History may be counted toward the core requirement. See the History Honors Program section for additional listings.

HIST—101. The Shaping of the Contemporary World 3 credits  
 This course aims to provide students with an introduction to the discipline and methodologies of history through the study of the relationship of the West to non-Western societies in the contemporary world. Attention is focused on understanding the unique events and trends of the 20th century and their political, social, economic, literary and artistic antecedents in the previous century. (ATTR: ARTS, CDH)

HIST—110. History Outside the Classroom 0 credits  
 This course is designed to give History majors an opportunity to experience history-related activities beyond the normal classroom. To complete the requirement, students must consult their advisor about an experience and complete the departmental forms. Qualifying to complete the requirement are history-related internships, study abroad, travel courses, social studies student teaching, presentation of a paper to a conference or symposium such as sponsored by the Omicron Xi chapter of Phi Alpha Theta, participation in the History Department’s Oral History Project, Model UN, Gettysburg Semester, pursuit of the Certificate in Revolutionary Era Studies, or 15 hours of a history activity at a historical society or institution approved by the department. The course is P/F. See advisor for more information. Prerequisite: Sophomore standing. (ATTR: ARTS)

HIST—201. The West and the World I 3 credits  
 The purpose of this course is to analyze the Western Tradition as it evolved from the Greeks to the Italian Renaissance; to understand and appreciate non-Western civilizations and their encounters with the West; to examine the human condition over time, both the role of the powerful and the powerless. (ATTR: ARTS, CAH, CFD, HEUR, HMEU, PNH)

HIST—202. The West and the World II 3 credits  
 The purpose of the course is to analyze the Western Tradition as it evolved from 1500 to 1900; to understand and appreciate non-Western civilizations and their encounters with the West; and to examine the human condition over time, both the role of the powerful and the powerless. (ATTR: ARTS, HEUR, CAH, CFD, GLST, HMEU)

HIST—203. American History I 3 credits  
 A survey of the political, geographic, social, economic, and intellectual factors that have contributed to the growth of the United States as a great power; from settlement through the Civil War era. (ATTR: AMSA, ARTS, CAH, CFD, HAM)

HIST—204. American History II 3 credits

A survey of the political, geographic, social, economic, and intellectual factors that have contributed to the growth of the United States as a great power; from the Civil War era to the present. (ATTR: AMSA, ARTS, CAH, CFH, HAM, HMAM)

HIST—303. America and the World I: U.S. Foreign Relations 1776-1920 3 credits

This survey examines the people, ideas, and institutions that have shaped U.S. foreign relations from the American Revolution to the end of World War I. The course takes a broad view of foreign relations to include interstate diplomacy and economic, social, and cultural interactions among individuals, institutions, and non-governmental organizations. Prerequisites: HIST—101. (ATTR: ARTS, HAM, AMSA, HMAM, GLST)

HIST—305. America and the World II: U.S. Foreign Relations in the 20th Century 3 credits

This survey examines the people, ideas, and institutions that have shaped U.S. foreign relations from World War I to the present. The course takes a broad view of foreign relations to include interstate diplomacy and also economic, social, and cultural interactions among individuals, institutions, and non-governmental organizations. Prerequisites: HIST—101. (ATTR: ARTS, GLST, HAM, AMSA, HMAM)

HIST—311. North American Colonies and the Atlantic World, 1492-1763 3 credits

A survey of the origins and development of the North American colonies from initial European discovery through the end of the French and Indian War. Particular emphasis will be on the 13 British colonies that would become the United States. Topics will include European and Native American background to settlement, cultural interaction between European colonists and Native Americans, the origins and development of African-American slavery, cultural and religious developments, the European wars for control of North America, and the economic and political maturation of the colonies. (ATTR: ARTS, HAM, AMSA, HMAM, REA)

HIST—312. The American Revolution in the Atlantic World, 1763-1815 3 credits

A survey of the origins and development of the American Revolution and the United States from the British imperial crisis of the 1760s through the conclusion of the War of 1812. Topics will include the political, social, and economic causes of the American Revolution, the military course of the Revolutionary War, the importance of the Atlantic World in the Revolutionary Era, the effect of the Revolution on slavery, gender, Native Americans, religious freedom, and representative government, and the early diplomatic relations between the United States and the Atlantic World. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—313. Antebellum America, 1815-1854 3 credits

This course explores the political, social, cultural, geographical, and economic expansion of the United States from the end of the War of 1812 to the sectional crisis over the Kansas territory in 1854. Students will analyze major themes including race, class, gender, immigration, social reform, nationalism, and sectionalism. (ATTR: ARTS, HAM, AMSA, HMAM, REA)

HIST—315. The Civil War and Reconstruction, 1850-1877 3 credits

Description and analysis of the causes for the disruption of the Union, the conduct of the war, and the policies and politics of the Reconstruction era. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—320. Emergence of Modern America, 1869-1920 3 credits

A study of the emergence of the United States as an industrial, urban nation and as a world power. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—323. Contemporary America, since 1920 3 credits

A study of the political, social, economic, and intellectual currents of modern America and its developing role in world affairs. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—325. United States Women's History 3 credits

This course will introduce students to the history of women in the United States from the pre-Columbian era to the present. Students will focus on issues of gender difference in the history of American business, labor, politics, culture, and social life, as well as considering differences between women with regard to race, ethnicity, class, and age. (same as WSTU—305) (ATTR: ARTS, HMAM, HAM, WSTU, AMSA)

HIST—327. New York State History 3 credits

The political, social, economic, and cultural history of the state of New York from the pre-Columbian era to the present. (ATTR: ARTS, AMSA, HAM, HMAM)

HIST—328. Dutch Roots of New York 3 credits

An academically oriented study of New York State's Dutch Background, this specially designed course offers three semester hours credit for an intense study program in the Netherlands, preceded by orientation lectures, and followed by supervised research into various aspects of the field tour. Travel costs paid by student. Cost varies each semester. Prerequisites: HIST – 101 or 190. (ATTR: ARTS, AMSA, HAM, HEUR, HIST 110)

HIST—330. The Middle East: Foundations of the Modern Experience 3 credits

A study of the region from the rise of Islam to the beginnings of modernization, with emphasis on the interplay of politics, religion, economy, and culture between 600 and 1800. (ATTR: ARTS, CAH, HNW, ISP)

HIST—333. The Middle East in Modern Times 3 credits

A study of the emergence of the regional state system, deep economic transformation, and wrenching social and cultural changes since 1800. Particular attention is given to the reasons for conflict and war. (ATTR: ARTS, GLST, HNW, ISP, MULT)

HIST—335. Greek Civilization 3 credits

A survey of the social, cultural, and political development of the Ancient Greeks, beginning with the Ancient Near East and continuing through the Homeric to the Hellenistic Age. This course may not be used to fulfill the requirement of six hours of foreign language study. (Same as CLSS—305) (ATTR: ARTS, CAH, HEUR, PNH)

HIST—336. Roman Civilization 3 credits

A survey of the social, cultural, and political development of Rome from its foundation to the fall of the Empire. (Same as CLSS—306) (ATTR: ARTS, CAH, HEUR, PNH)

HIST—337. Late Antiquity 3 credits

The study of Late Antiquity will investigate the fundamental period of transition from the classical to medieval world as it was experienced across the Mediterranean. Spanning the crises of the Late Roman Empire to its disintegration, it will encompass diverse areas of inquiry: the establishment of Christianity within the Roman empire; the barbarian migrations and the ensuing destabilization of the Roman Empire in the west; the emergence of the papacy and the rise of the Frankish king, Charlemagne as a new emperor; the continuity of the Roman Empire in the east through the successors of Augustus who ruled the "Byzantine" Empire from Constantinople; the emergence of the Islamic caliphate and the founding of Bagdad. Same as CLSS—340 (ATTR: ARTS, HEUR, MRST, PNH)

HIST—338. The Spartans 3 credits

Students will study the history and culture of Sparta from its beginnings ca. 1,000 BCE to its eventual collapse in the 4th Century BCE. The name Sparta has survived in the cultural memory of the west for more than 2,000 years in no small part due to its reputation for heroism and military might. We will examine the character of Spartan society and its emphasis on the heroic ideal. Students will learn how this ideal evolved, and how it enabled Sparta to become the most powerful state in ancient Greece. We will learn that Sparta's truly unique military, social and political systems came at a heavy price; this aspect of Spartan culture will constitute another major focus of the course. Our examination of Sparta and its history will be based on evidence derived from primary sources, archaeology, art and secondary sources. Same as CLSS—360 (ATTR: ARTS, HEUR, PNH)

HIST—340. Latin America: The Colonial Period 3 credits

A survey of the history of Latin America from 1492 to independence in the 1820s. (ATTR: ARTS, CAH, CFD, HNW, ISP, MULT, REA)

HIST—343. Latin America: The National Period 3 credits

A survey of the history of Latin America from the 1820s to the present. (ATTR: ARTS, CAH, HNW, ISP)

HIST—345. History of Mexico 3 credits

The political, social, and economic development of Mexico from colonial times to the present. (ATTR: ARTS, CAH, HNW, ISP)

HIST—350. History of East Asia I 3 credits

A survey of East Asian history with emphasis on the political, economic, social, and cultural development of China, Japan, and Korea: from earliest times to 1600. (ATTR: ARTS, CAH, HNW, ISP)

HIST—353. History of East Asia II 3 credits

A survey of East Asian history with emphasis on the political, economic, social, and cultural development of China, Japan, and Korea: since 1600. (ATTR: ARTS, GLST, HNW, ISP, MULT)

HIST—360. History of Modern China 3 credits

History of modern China since 1840, with particular attention given to China's response to the West, the disintegration of Imperial China, the development of nationalism, and the rise of Chinese communism. (ATTR: ARTS, HNW, ISP, MULT)

HIST—363. History of Modern Japan 3 credits

History of modern Japan, with principal emphasis on political, economic, intellectual, and social developments since 1853. (ATTR: ARTS, HNW, ISP, MULT)

HIST—370. Africa I: Genesis of Modern Africa 3 credits

A general examination of the social, political, economic and environmental developments of the indigenous African states including their response to Eastern and Western contacts from pre-history to 1875. (ATTR: ARTS, HNW, ISP, MULT, REA)

HIST—373. Africa II: The Modern Transition 3 credits

A general examination of the development of Africa from 1875 with emphasis not only on the economy, society, and politics but also the impact of colonization upon the course of modernization. (ATTR: ARTS, CAH, GLST, HNW, ISP, MULT)

HIST—375. Women in European History 3 credits

This course surveys the history of European women from ancient times to the present, with particular attention to how the study of women and gender has changed the way historians analyze the past. The construction of the concepts of masculinity and femininity will be explored through careful examination of primary and secondary materials. The latest historiographical approaches to the study of women and gender will be considered as will new resources for research. (ATTR: ARTS, ISP, WSTU, HMEU, HEUR)

HIST—376. Franciscan History 3 credits

This course will familiarize the student with the persons, events and ideas that have inspired the Franciscan Movement. The student will come to understand the background of Franciscanism in the context of the High Middle Ages, and in contrast to earlier forms of religious life within the Christian tradition. The student will learn about the role of Franciscans in the development of western art; in higher education; in politics; in the age of exploration; and in the development of Christian Spirituality over the past 800 years. Appropriate attention will be paid to the internal struggles of Franciscans; to the role of women in the Franciscan family; and to the place of Franciscans in the Anglican Communion. The course will culminate in a look at the founding of Siena College as a Franciscan contribution to higher education. Prerequisites: HIST—201. (ATTR: ARTS, CFH, HEUR, HNW)

HIST—378. Medieval Europe 3 credits

A survey of western European history between roughly 450 and 1350, tracing political, social, and cultural trends. This course will focus on the formation of an entity called "Europe," distinct from its neighbors in the Byzantine and Arabic worlds, yet including non-Christians as an integral part of European history. (ATTR: ARTS, CFH, HEUR, HMEU, MRST, PNH)

HIST—381. Renaissance Europe 3 credits

A survey of European history between roughly 1350 and 1500, with special emphasis on cultural change and on Italy. (ATTR: ARTS, HEUR, HMEU, PNH)

HIST—384. The Reformation of Christendom 3 credits

The reform of western Christianity in the sixteenth and seventeenth centuries as Europe moved from the medieval to the modern world. Special attention will be paid to significant figures such as Luther, Calvin, and Ignatius Loyola. Prerequisites: (HIST—101 or 190) and (RELG—101 or 121 or 141 or 181). (ATTR: ARTS, HEUR, HMEU, CFH, PHN) (Same as RELG—301)

HIST—387. Nineteenth Century Europe, 1815-1915 3 credits

This course treats industrialization and social change, the emergence of socialism and workers' movements, political and economic liberalism, German and Italian unification, Social Darwinism, and European imperialism. (ATTR: ARTS, HEUR, HMEU, ISP)

HIST—392. Europe, 1914-1945 3 credits

A study of the period as affected by the First World War, the Russian Revolution, the rise of Fascism in Italy and Nazism in Germany, the Great Depression, the problems of the democratic states, the breakdown of international cooperation, and World War II. (ATTR: ARTS, HEUR, ISP, HMEU)

HIST—394. Contemporary Europe since 1945 3 credits

A historical treatment from the European perspective of the principal developments and crises from the end of World War II to the present. (ATTR: ARTS, HEUR, ISP, HMEU)

HIST—396. England from 1485-1815 3 credits

The emergence of modern England during the reigns of the Tudors, Stuarts and first four Hanoverians, with emphasis on political, social and economic changes. (ATTR: ARTS, HEUR, ISP, PNH, HMEU, REA)

HIST—398. Nineteenth and Twentieth Century Britain 3 credits

The history of Great Britain and the empire from 1815 to the present, with emphasis on political, social, and economic changes. (ATTR: ARTS, HEUR, HMEU, ISP)

HIST—401 (402, 403). Colloquium in History 3 credits

This course is designed to explore areas and topics not treated in the traditional history course offerings. The area or theme will be studied in depth and emphasis will be on discussion. The subject will be announced before the semester in which the colloquium is to be given. An additional fee may be required, depending on the topic offered. May be taken more than once with different topics. (ATTR: ARTS, REA)

HIST—411. Slavery in Historical Perspective 3 credits

An historical examination across the major world civilizations from the ancient period to the present of the development of slavery. Focus will be upon the causes and sources of slavery, its impact and consequences upon society, attitudes toward slavery, the life of the slave, and abolition. (ATTR: ARTS, CAH, CFJ, HAM, HEUR, HNW, MULT, PNH, AMSA, REA)

HIST—413. History of Modern Germany 3 credits

Political, social, and economic evolution of the German nation from the Vienna settlement to the present. (ATTR: ARTS, HEUR, ISP, HMEU)

HIST—415. The French Revolution and Napoleon 3 credits

A study of the revolution and its Napoleonic aftermath in its French and international aspects. (ATTR: ARTS, CAH, HEUR, HMEU, ISP, PNH, REA)

HIST—418. History of Modern France 3 credits

Political and cultural development of modern France from the French Revolution to the present. (ATTR: ARTS, HEUR, ISP, HMEU)

HIST—421. Russian Foreign Policy: The Soviet Period 3 credits

An analysis of Soviet foreign relations: goals, strategy, and tactics, including the Cold War and post-Soviet foreign policy. (ATTR: ARTS, HMEU, HEUR, ISP)

HIST—425. Russian Intellectual and Social History 3 credits

The evolution and development of Russian society and currents of thought from Kievan Rus to the present. (ATTR: ARTS, CAH, HEUR, HMEU, ISP)

HIST—428. History of Modern Russia 3 credits

A survey of Russian history from the reign of Ivan III (1462-1505) to the 20th century. (ATTR: ARTS, HEUR, HMEU, ISP)

HIST—430. Russia Since 1900 3 credits

The study of the reign of Nicholas II (1894-1917), the Soviet period, and post-Soviet Russia. (ATTR: ARTS, HEUR, ISP, HMEU)

HIST—451. U.S. Social and Cultural History to 1877 3 credits

The development of social institutions and currents of thought from the 16th century to mid-19th century. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—453. U.S. Social and Cultural History after 1877 3 credits

The development of social institutions and currents of thought from the mid-19th century to the present. (ATTR: ARTS, HAM, AMSA, HMAM)

HIST—455. The Westward Movement, 1750-1890 3 credits

The development of the American West from its role in the Anglo-French conflict for empire to the official closing of the frontier by the census of 1890. (ATTR: AMSA, ARTS, HAM, HMAM, REA)

HIST—457. American Immigration in Historical Perspective 3 credits

A study of the historical movement of peoples from around the world to the United States within the context of global political and economic changes that emphasizes transnational connections and the complex history of race, citizenship, and intercultural relations. (ATTR: AMSA, ARTS, GLST, HAM, HMAM, MULT)

HIST—461. African-American History 3 credits

A study of the course of black history in the United States, including migration to English America, slavery, emancipation, segregation, rise of organized protest movements, and the civil rights revolution, as well as a consideration of the influence of blacks upon various phases of American political, social, economic, and intellectual development. (ATTR: ARTS, CAH, HAM, ISP, AMSA, HMAM, MULT)

HIST—463. U.S. Military History 3 credits

A study of the military history of the U.S. (and necessary European background) from the age of settlement through Vietnam, concentrating on the roots of the armed forces in the society and the impact of change, social, political, and technological on the role and functions of the armed forces of the U.S. (ATTR: AMSA, ARTS, HAM, HMAM, REA)

HIST—465. Spanish Borderlands 3 credits

An historical examination of the Spanish borderland region of the United States between 1513 and 1821 with concluding remarks regarding the period of Mexican authority over Texas and the Southwest between 1821-1848. Focus will include the exploration and occupation of the region as well as social, political, economic, and military developments. (ATTR: AMSA, ARTS, CAH, HAM, HNW, ISP, MULT, REA)

HIST—471. Conflict in South Africa 3 credits

A survey of South Africa history from pre-colonial times through the arrival of white settlers and the ensuing race conflict which has raged through the centuries, with emphasis on the social, political and economic dimensions, up to the present. (ATTR: ARTS, HNW, ISP, MULT)

HIST—475. Public History 3 credits

This course considers the practice of history outside of the formal classroom. Areas of study may include, but are not limited to, museums, libraries, archives, state and national parks, historical societies, theme parks, publishing, filmmaking, archaeology, and historic preservation. (Same as AMST-475) (ATTR: ARTS, HAM, HMAM, REC)

HIST—480. Internship in History 3 credits

Work in local historical societies, museums, archival and resource centers, etc. Open to second semester Juniors and Seniors who have completed a minimum of 12 credit hours in history, including U.S. history, and who present a GPA of 3.0 or higher in history and 2.9 or higher overall. Permission of the Director of American Studies and the Head of the History Department is required. Evaluation of such credit is made by the staff of the participating institution, and the Director of American Studies or a member of the History Department chosen by the Department in consultation with the Director of American Studies. (Cross-listed as AMST—480) (ATTR: ARTS, INT)

HIST—485 (486, 487). Topics in Revolutionary Era History 3 credits

A study of specialized topics encompassing the Revolutionary Era from 1754 to 1815 that include: Economics of the Revolution; Education in the Colonies; Blacks in the Revolution: Free and Slave; Local History-Albany, Schenectady, Troy in the Revolution; Weapons and Tactics in the World and Revolution, 1785-1815; Colonial Women; Diplomacy in the Revolutionary Era. The specific topic is announced in the schedule of course offerings. Students may repeat the course for credit provided the selected subject matter has not been taken previously for credit. Prerequisite: HIST-203. (Cross-listed as AMST-485). (ATTR: ARTS, HAM, AMSA, HMAM, REA)

HIST—495. Independent Study 1 - 3 credits

Highly advanced individual study under the direction of a member of the department of a topic chosen by the student and based upon his/her particular interest and background. It will involve private consultation with the advisor, independent research, and the writing of a research paper. A senior History major with exceptional qualifications and a record of distinctive achievement may pursue independent study with the approval of an instructor and the department. (ATTR: ARTS)

HIST—497. Proseminar for Capstone 3 credits

This seminar aims to introduce history students to both the methods and philosophical problems of history. The seminar will first consider a historical issue or a school of historical writing or the works of an eminent historian. It will then consider the philosophy of history and the questions historians have asked about their discipline. Assumes Junior standing with 75 hours, and 18 hours of History including either HIST—201 and HIST - 202 or HIST - 203 and HIST - 204. The course must be taken preceding enrollment in HIST—499. It cannot be taken concurrently with HIST—499. Permission of instructor required. (ATTR: ARTS)

HIST—499. History Capstone 3 credits

A student research oriented course requiring a substantial paper based on direct investigation of primary sources. Papers will be critiqued by members of the class. Additional, shorter writing assignments may also be required. Topic will vary with instructor. Open only to History and History Education majors. Prerequisites: Senior standing (90 hours), HIST-101, HIST-497, 21 hours of History (including HIST-101 and HIST-497). (ATTR: ARTS, REA)

### **History Honors Program**

HIST—190. Level I Honors Seminar: Shaping of the Contemporary World 3 credits

Selected topics in twentieth century world history. This seminar fulfills the core requirements of three credits in history for those students who qualify. (ATTR: ARTS, CDH, HNRS)

HIST—390. Honors Seminar: Selected Research Topics 3 credits (ATTR: ARTS, HNRS)

HIST—490. Honors Seminar: Selected Research Topics 3 credits (ATTR: ARTS, HNRS)

### **Modern Language and Classics Department**

Chair: Dr. Michael Sham, Prof.

Prof.: Dr. Carolyn F. Malloy, Dr. Lydia C. Tarnavsky

Assoc. Prof: Dr. Nathalie M. Degroult

Asst. Prof.: Dr. Lisette V. Balabarca, Dr. Marcela T. Garces

The study of modern languages has multiple objectives. It presents to the student vocabulary, idiom, and structure of a foreign language, and at the same time it teaches the student to understand the spoken language and to converse in it, to read well and to write correctly. Also, through the study of cultural differences, modern language courses endeavor to help free students' thinking from provincialism and narrow-minded world views. Through the study of literature, the student moves beyond the language itself and gains important insight into other civilizations, other times and their ideas.

The objectives of the Classics curriculum are twofold. First, the Department teaches courses in Greek or Latin as a preparation for a professional career where a knowledge of the original languages is essential. Second, the Department teaches courses (requiring no knowledge of Greek or Latin) which set forth significant aspects of classical civilization: its pervasive ideals, political experiences, artistic forms, and literary archetypes. The offerings of the Classics curriculum are designed to provide a student with a unique grasp of the origins of Western Culture. Courses are structured in three units: GREK-Greek Language and Literature; LATN-Latin Language and Literature; CLSS-Greek and Roman Studies.

All incoming students who desire to begin their modern language study on the intermediate level shall present a minimum of two years modern language study with a grade of C or higher.

Modern Language majors interested in international studies and international business should consult the section of the catalog describing Siena's program in International Studies, Foreign Languages, and Business.

Individuals who are native speakers of the language being studied will require departmental permission to take FREN—101 through FREN—302 or SPAN—101 through SPAN—302 or GERM—101 through GERM—302 or RUSS—101 through RUSS—302 for credit.

**Requirements for the Major, B.A. in French ( 33.000 credits ):**

FREN 301 - French Conversation I	3 cr.
FREN 302 - French Conversation II	3 cr.
FREN 410 - Advanced Grammar and Composition	3 cr.
One course on French Society and Culture course taught in French (such as FREN 330 or FREN 340 or their equivalents	3 cr.
FREN 400 or higher with the attribute of FRLT *	3 cr.
One course at the 400 level or above which is Literature, Culture or Cinema *	3 cr.
	15 cr.

Courses below FREN 201 cannot count in the major.

Students who plan to teach or enter graduate study are advised to take additional courses in a second foreign language.

A study abroad experience is strongly advised (preferably a minimum of a semester during the junior year). Courses taken abroad may count toward the major.

# indicates that this course must be at taken at Siena.

\* Indicates that one of these two courses must be taken at Siena.

**Requirements for the Minor in French (18.000 credits):**

FREN 301 - French Conversation I	3 cr.
FREN 302 - French Conversation II	3 cr.
One French Literature course taught in French (Attribute FRLT)	3 cr.
One course on French "Society or Culture" taught in French (Such as FREN 330 or 340)	3 cr.
French Electives	6 cr.

Course below FREN 201 cannot count toward the minor.

**Requirements for the Major, B.A. in Spanish: ( 30.000 credits ):**

SPAN 301 - Communication in Spanish I	3 cr.
SPAN 340 - Advanced Grammar (must be completed at Siena)	3 cr.
SPAN 401 - Spanish Literature I	3 cr.
SPAN 402 - Spanish Literature II	3 cr.
Spanish Electives	18 cr.

Courses below Spanish 201 cannot count in the major.

Students who plan to teach or enter graduate study are advised to take additional courses in a second foreign language.

**Requirements for the Minor, Spanish (18.000 credits):**

SPAN 301 - Communication in Spanish I	3 cr.
SPAN 302 - Communication in Spanish II	3 cr.
One Spanish Literature course (attribute SPLT)	3 cr.
Spanish Electives	9 cr.

Courses below SPAN 201 cannot count in the minor.

**Requirements for the Minor, German (18.000 credits):**

18 credits in German	18 cr.
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Courses below GERM 201 cannot count in the minor.

**Requirements for the Major, B.A. in Classics: ( 36.000 credits ):**

24 credits in Classics	24 cr.
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12 credits in Greek	<b>OR</b>	
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12 credits in Latin	12 cr.
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Students who plan to enter graduate study in Classics are advised to take additional courses in the second of the classical languages. For students planning an advanced degree it is also recommended that they begin the study of French and/or German.

**Requirements for the Minor, Classics (18.000 credits):**

6 credits in Greek	<b>OR</b>	
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6 credits in Latin	6 cr.
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An additional 12 credits from the following: LATN, GREK or CLSS.	12 cr.
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**Requirements for the Minor, Greek (18.000 credits):**

12 credits in Greek	12 cr.
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6 credits in Classics	6 cr.
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**Requirements for the Minor, Latin (18.000 credits):**

12 credits in Latin	12 cr.
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6 credits in Classics	6 cr.
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**Requirements for the Minor, Italian (18.000 credits):**

*ITAL 201 – Intermediate Italian I	3 cr.
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*ITAL 202 – Intermediate Italian II	3 cr.
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*ITAL 301 – Communication in Italian I	3 cr.
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*ITAL 302 – Communication in Italian II	3 cr.
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**Additional credits of advanced courses taken outside of Siena (at nationally or internationally accredited institutions)	6 cr.
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\*A minimum of three courses must be taken at Siena.

\*\* Additional courses taken to count toward the minor must be approved by the Assistant Dean

Courses below ITAL 201 cannot count in the minor.

**Education Certification in French or Spanish**

French and Spanish majors seeking entrance to the Education Certification Program must consult their language advisors regarding specific requirements for the program.

The Modern Languages and Classics Department will recommend for participation in the Education Certification Program students who have achieved: 1) an overall GPA of at least 3.0; 2) a GPA of 3.2 in the major field, and 3) a score of at least an Advanced Low on their Oral Proficiency Interview (OPI) which is based on the American Council for the Teaching of Foreign Languages (ACTFL) standards. Students are responsible for the expense of the OPI.

OPI requirements for acceptance to the Education Certification Program:

The targeted level of oral proficiency is a rating of Advanced Low on the OPI. We use the following criteria for acceptance into the Education Certification Program:

1. Students who receive a minimum of Advanced Low will be admitted immediately into the Education Certification Program;
2. Students who receive an Intermediate High on the oral OPI will be conditionally accepted into the Education Certification Program but must engage in remedial academic work to improve their language skills, and

3. Students who receive less than Intermediate High on the OPI will not be admitted into the Education Certification Program.

The OPI must be taken within a month of returning from an abroad experience. Fall experience: by January 31; Spring experience: by June 30. Study abroad is an optimal way to achieve oral proficiency. A minimum of a semester abroad in a French or Spanish speaking country is strongly advised. Students will not be recommended for certification until they achieve a minimum of Advanced Low as defined by the ACTFL standards.

### **American Sign Language Description of Courses**

AMSL—101. Elementary American Sign Language I 3 credits

An introduction to visual-gestural language. Contains the manual alphabet, basic numbers, sign vocabulary, aspects of deaf culture and history, and basic conversational skills with American Sign Language (ASL). No prerequisites.

AMSL—102. Elementary American Sign Language II 3 credits

A continuation of AMSL 101, an introduction to visual-gestural language. Contains the comprehensive numbers, classifiers and grammatical structures. The skill development of conversation and storytelling is emphasized. Prerequisite: AMSL—101

### **Arabic Description of Courses**

ARAB—035. Arabic Study Travel Course-English 3 credits

This course consists of coursework that will be taught in English and consist of coursework in English followed by an intensive travel study component in a selected Arabic speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired in the class and abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will not fulfill a language requirement. Prerequisite: Permission of Instructor. (ATTR: ARTS, ISP, CFD, MULT, GLST)

ARAB—101. Fundamentals of Arabic I 3 credits

The study of formal spoken and written modern Arabic: the writing system, pronunciation, vocabulary, grammar, and composition with supplementary reading in the language. Introduction to cultural realities of the Arabic-speaking world. This course is for students with no prior study of Arabic. (ATTR: ARTS)

ARAB—102. Fundamentals of Arabic II 3 credits

A continuation of ARAB 101. Further study of grammar, vocabulary, and composition with supplementary readings in the language. Continued study of cultural realities of the Arabic-speaking world. This course is for students who have completed the equivalent of one semester of college Arabic. (ATTR: ARTS)

ARAB—201. Intermediate Arabic I 3 credits

A thorough review of the structures of Arabic, supplemented by selective readings. The audio lingual aspect of the language is further developed, and the ability to read with understanding is increased. Further cultural study. This course is for students who have completed the equivalent of two semesters of college Arabic. (ATTR: ARTS)

ARAB—202. Intermediate Arabic II 3 credits

A continuation of ARAB 201. This course is for students who have completed the equivalent of three semesters of college Arabic. (ATTR: ARTS)

ARAB—301. Communication in Arabic I 3 credits

To increase proficiency in speaking Arabic and deepening the understanding of the cultural realities. This course is for students who have completed the equivalent of four semesters of college Arabic. (ATTR: ARTS)

ARAB—302. Communication in Arabic II 3 credits

A continuation of ARAB 301. Emphasis on the development of writing skills and extended study of cultural realities. This course is for students who have completed the equivalent of five semesters of college Arabic. (ATTR: ARTS)

ARAB—305. Arabic Study Travel Course 3 credits

This academically oriented course will be taught in Arabic and consists of coursework followed by an intensive travel study component in a selected Arabic-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will fulfill a language requirement. Prerequisites: ARAB-102 and permission of Instructor. (ATTR: ARTS, ISP, CFD, MULT, GLST)

### **French Description of Courses**

FREN—025. Modern French Novel in Translation 3 credits

The course examines representative works from Proust to the present day and provides discussion of each author's ideas of basic modern problems in English. No knowledge of French language is required. May not be used as part of French major or minor. (ATTR: ARTS, CAL)

FREN—026. French Literature in Translation 3 credits

A study of selected masterworks of French literature from its medieval beginnings through the twentieth century, including novels, short stories, drama and poetry, read in English translation. No knowledge of French language is required. May not be used as part of French major or minor. (ATTR: ARTS, CAL, CFH)

FREN—027. French Cinema 3 credits

A study of selected contemporary French language films (subtitled) with focus on the films' artistic expression and psychological, social, historical, and cultural content. Course taught in English. No prerequisites. (ATTR: ARTS, CAA, CFD, GLST)

FREN— 035. French Study Travel Course-English 3 credits

This academically oriented course will be taught in English and consist of coursework in English followed by an intensive travel study component in a selected French- speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/ research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired in the class and abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will not fulfill a language requirement, nor will it count toward a major or minor in French. Prerequisites: Permission of Instructor. (ATTR: ARTS: ISP;CFD;MULT;GLST)

FREN—101. Fundamentals of French I 3 credits

The study of French pronunciation, vocabulary, grammar, and composition with supplementary reading in the language. (ATTR: ARTS)

FREN—102. Fundamentals of French II 3 credits

A continuation of FREN—101. Prerequisite: FREN—101 or equivalent. (ATTR: ARTS)

FREN—201. Intermediate French I 3 credits

A thorough review of the structures of the French language, supplemented by selected readings. Emphasis will be placed on the oral aspect of the language. Prerequisite: FREN—101 and 102 or evidence of having successfully completed at least two years' study of French on the secondary level. (ATTR: ARTS)

FREN—202. Intermediate French II 3 credits

A continuation of FREN—201. Prerequisite: FREN—201. (ATTR: ARTS)

FREN—301. French Conversation I 3 credits

This course is intended for those students who have a good knowledge of written French but who have had limited opportunity to hear and speak it. Class work will consist of building the vocabulary of everyday speech with a view towards an active vocabulary and giving confidence in oral expression. Prerequisites: FREN—201 and 202 or equivalent. (ATTR: ARTS, ISP)

FREN—302. French Conversation II 3 credits

A continuation of the work of French Conversation I but with stress upon more complicated structures, more extensive and specialized vocabularies. The aim is to prepare the student for increased ease and ability to carry on day-to-day activities in French. Prerequisites: FREN—201 and 202, or equivalent. (ATTR: ARTS, ISP)

FREN—305. French Study Travel Course 3 credits

This academically oriented course will be taught in French and consist of coursework followed by an intensive travel student component in a selected French-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will fulfill a language requirement and count toward a major or minor in French. Prerequisites: FREN-202 and permission of instructor. (ATTR: ARTS, CFD, GLST, MULT, ISP)

FREN—310. Advanced French Conversation 3 credits

Advanced oral work through class discussion of selected topics and creation of dialogues. Intensive pronunciation work. Prerequisite: FREN—301 and 302 or permission of instructor. (ATTR: ARTS, ISP)

FREN—330. French Civilization 3 credits

A survey of the factors and forces that made Modern French Civilization. Prerequisite: FREN—301. (ATTR: ARTS, GLST, ISP)

FREN—340. Civilization of Québec 3 credits

A study of Québec, through its history, geography, arts and literature, political, and social structures. A visit to the province of Québec is required. Taught in French. Prerequisite: FREN—301 or equivalent. (ATTR: ARTS, GLST, ISP)

FREN—360. Introduction to French Literature 3 credits

Reading and analysis of texts of different genres, which will be selected primarily from the works of modern French authors. In order to develop further the oral skills, class discussions will be conducted in French. Prerequisite: FREN—301 or equivalent. (ATTR: ARTS, ISP, FRLT)

FREN—370. Introduction to French Drama 3 credits

This course constitutes an introduction to French Literature through the medium of the Drama. (ATTR: ARTS, ISP, FRLT)

FREN—380. The Short Story 3 credits

This course introduces the student to French literature through the medium of one of its most important genres. With an important emphasis on oral work on the part of the student, the course will be conducted in French. Prerequisites: FREN—301. (ATTR: ARTS, ISP, FRLT)

FREN—400. Topics in French 3 credits

An in-depth study of specialized topics in French. This course may be taken more than once with different subject matter and it is intended for the advanced student in French. Prerequisites: FREN-302. (ATTR: ARTS)

FREN—401. Survey of French Literature I 3 credits

The course demonstrates the evolution of major themes in French literature in all genres from their origins to the beginnings of modern times. Prerequisites: FREN—301. (ATTR: ARTS, ISP, FRLT)

FREN—402. Survey of French Literature II 3 credits

An introduction to French writers of the nineteenth and twentieth centuries. Included are examples of short story, poetry, and drama. Prerequisites: FREN—301. (ATTR: ARTS, ISP, FRLT)

FREN—410. Advanced Grammar and Composition 3 credits

A systematic presentation of the more complex points of French grammar. An application of these grammatical principles will be demonstrated through extensive written exercises, including translations and original compositions. Prerequisite: FREN—301. (ATTR: ARTS, ISP)

FREN—495. Independent Study in French 1 - 3 credits

A student taking a major or minor in French may work independently on a topic of special interest. The student consults with the professor with whom he/she decides on a study that will permit a definite accomplishment by the end of the semester. This study must be approved by the department head and the dean. In a term paper or

essay he/she is expected to demonstrate familiarity with the tools basic to his/her study and an awareness of the methods appropriate to pursuing his/her interest. (ATTR: ARTS, ISP)

## **German**

### **Description of Courses**

**GERM—025. Twentieth Century Germanic Literature in Translation 3 credits**

A study of selected masterpieces of German, Austrian, and Swiss Literature including novels, short stories, drama, and poetry, read in English translation. No prerequisite. (ATTR: ARTS, GLST, CAL, CFH)

**GERM—026. Twentieth Century German Cinema 3 credits**

A study of selected 20th century German language films (subtitled) with focus on the films artistic expression and psychological, social, historical, and cultural content. Course taught in English. No prerequisites. (ATTR: ARTS, CAA, CFD, GLST)

**GERM—027. US and German Media 3 credits**

This course is a comparative study of U.S. and German media which focuses on its content, form, and impact. In this course, students will: decode, evaluate and compare data presented in a variety of U.S. and German information sources; analyze how media and its message are presented in both countries; and, critically reflect upon the media message and their understanding of it. This course will consider printed, audio, and visual information as text which will be analyzed for its information content, its social, and cultural bias, as well any possible intended manipulation of the reader's/listener's/viewer's perspective.

Throughout this course, the interpretation of the medium will consistently focus attention on the Franciscan heritage concern which embraces a broad sense of tradition. Media has been a means of communication since humans existed. The study of media, in its diverse forms (visual, audio or printed) always had and has a subtext grounded in a culture and heritage which evolved through the ages

This course will be taught in English. All German materials will be in translation, dubbed, or subtitled. (ATTR: ARTS, CFD, GLST)

**GERM—035. German Study Travel Course -English 3 credits**

This academically oriented course will be taught in English and consist of coursework in English followed by an intensive travel study component in a selected German-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will not fulfill a language requirement, nor will it count towards a minor in German. Prerequisites: Permission of Instructor. (ATTR: ARTS, ISP, CFD, MULT, GLST)

**GERM—101. Fundamentals of German I 3 credits**

Introduction to elementary German grammar, syntax, and vocabulary. Designed for students with no previous knowledge of German. (ATTR: ARTS)

**GERM—102. Fundamentals of German II 3 credits**

A continuation of GERM—101. Prerequisite: GERM—101 or 2 years of high school German. (ATTR: ARTS)

**GERM—201. Intermediate German I 3 credits**

Intensive review of grammar and syntax, supplemented by selected readings. Prerequisite: GERM—101, 102 or three years of high school German. (ATTR: ARTS)

**GERM—202. Intermediate German II 3 credits**

A continuation of GERM—201. Prerequisite: GERM—201 or four years of high school German. (ATTR: ARTS)

**GERM—230. German Drama: Studied and Staged 3 credits**

This course is a literature/language course which will utilize the process of drama staging as an additional tool for learning language. It is not a performing arts class. The course will introduce students to an in-depth literary study of a selected Germanic drama, provide students with an opportunity to actively engage in the use of the German language in rewriting parts of the drama for production purposes, and enable students to stage the drama, which will not only drill language, but also facilitate the understanding of drama as not only content but

also form in performance space. Prerequisites: German—101 and 102, or permission of the instructor. (ATTR: ARTS)

GERM—301. Conversational German I 3 credits  
Emphasis placed on vocabulary building and oral proficiency. Little or no grammar review.  
Prerequisite: GERM—202 or consent of instructor. (ATTR: ARTS, ISP)

GERM—302. Conversational German II 3 credits  
Continuation of GERM—301. Prerequisite: GERM—301 or permission of instructor. (ATTR: ARTS, ISP)

GERM—305. German Study Travel Course 3 credits  
This academically oriented course will be taught in German and consists of coursework followed by an intensive travel study component in a selected Germanic-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will fulfill a language requirement and count toward a minor in German. Prerequisites: GERM-102 and permission of instructor. (ATTR: ARTS, ISP, CFD, MULT, GLST)

GERM—330. German Civilization I 3 credits  
A survey of German history and culture from the Period of the Migration to the Age of Frederick the Great. Prerequisite: GERM—202 or permission of instructor. (ATTR: ARTS, ISP)

GERM—331. German Civilization II 3 credits  
A survey of German history and culture from the Age of the Revolution to the Weimar Republic. Prerequisite: GERM—202 or permission of instructor. (ATTR: ARTS, ISP)

\*\*\*GERM—340. Modern German Readings I 3 credits  
Selected German Readings offered as a tutorial for advanced students of German. Prerequisite: GERM—202 or permission of instructor. (ATTR: ARTS, ISP)

\*\*\*GERM—341. Modern German Readings II 3 credits  
Continuation of GERM—340 Prerequisite: GERM—340 or permission of instructor. (ATTR: ARTS, ISP)

### **Italian Description of Courses**

ITAL—035. Italian Study Travel Course-English 3 credits  
This academically oriented course will be taught in English and consist of coursework followed by an intensive travel study component in Italy. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio- economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course may not be used as part of the Italian minor and will not fulfill a language requirement. Prerequisites: Permission of Instructor. (ATTR: ARTS, ISP,CFD,MULT,GLST)

ITAL—101. Fundamentals of Italian I 3 credits  
The study of Italian pronunciation, vocabulary, grammar, and composition with supplementary reading in the language. (ATTR: ARTS)

ITAL—102. Fundamentals of Italian II 3 credits  
A continuation of ITAL—101. Prerequisite: ITAL—101 or equivalent. (ATTR: ARTS)

ITAL—201. Intermediate Italian I 3 credits  
A thorough review of the structures of the Italian language, supplemented by selected readings. The audio-lingual aspect of the language is further developed, and the ability to read with understanding is increased. Prerequisite: ITAL—101 and 102, or evidence of having successfully completed at least two years study of Italian on the secondary level. (ATTR: ARTS)

ITAL—202. Intermediate Italian II 3 credits  
A continuation of ITAL—201. Prerequisite: ITAL—201. (ATTR: ARTS)

ITAL—301. Communication in Italian I 3 credits

To increase proficiency in speaking Italian. Prerequisites: ITAL—202 or equivalent. (ATTR: ARTS)

ITAL—302. Communication in Italian II 3 credits

A continuation of ITAL—301 with emphasis on the development of writing skills. Prerequisite: ITAL—301. (ATTR: ARTS)

ITAL—305. Italian Study Travel Course 3 credits

This academically oriented course will be taught in Italian and consists of coursework followed by an intensive travel study component in Italy. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. The cost varies each semester. This course will fulfill a language requirement and count toward a minor in Italian. Prerequisites: ITAL-202 and permission of instructor. (ATTR: ARTS, CFD, ISP, GLST, MULT)

## **Russian**

### **Description of Courses**

RUSS—035. Russian Study Travel Course-English 3 credits

This academically oriented course will be taught in English and consist of coursework followed by an intensive travel study component in Russia. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will not fulfill a language requirement. Prerequisites: Permission of Instructor. (ATTR: ARTS; ISP; CFD; MULT; GLST)

\*\*\*RUSS—101. Fundamentals of Russian I 3 credits

An introductory study of Russian phonetics, pronunciation, vocabulary, and grammar. Stress upon the spoken language, with oral drill and dialogue practice. (ATTR: ARTS)

\*\*\*RUSS—102. Fundamentals of Russian II 3 credits

A continuation of RUSS—101. Prerequisite: RUSS—101 or the equivalent. (ATTR: ARTS)

RUSS—201. Intermediate Russian I 3 credits

The study of Russian grammar and vocabulary is continued. At this level both spoken language and reading are stressed. Prerequisite: RUSS—102 or the equivalent. (ATTR: ARTS)

RUSS—202. Intermediate Russian II 3 credits

A continuation of RUSS—201. Prerequisite: RUSS—201 or the equivalent. (ATTR: ARTS)

\*\*\*RUSS—301. Russian Conversation I 3 credits

The emphasis is on speaking Russian. Colloquial speech patterns will be studied. To broaden vocabulary, increase reading skills and stimulate classroom discussion, texts ranging from Pushkin to Solzhenitsyn will be used. Grammar and syntax will be reviewed. Prerequisite: RUSS—202 or the equivalent. (ATTR: ARTS, ISP)

\*\*\*RUSS—302. Russian Conversation II 3 credits

Continuation of RUSS—301. Prerequisite: RUSS—301 or the equivalent. (ATTR: ARTS, ISP)

RUSS—305. Russian Study Travel Course 3 credits

This academically oriented course will be taught in Russian and consist of coursework followed by an intensive travel study component in Russia. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will fulfill a language requirement. Prerequisites: RUSS-102 and permission of instructor. (ATTR: ARTS, ISP, CFD)

\*\*\*RUSS—401. Advanced Russian Readings and Conversation I 3 credits

Development of reading and speaking skills will be emphasized. Grammar and syntax will be reviewed and new material introduced. Emphasis will be placed on increasing both passive and active vocabulary using a wide

range of sources including textbooks, literary and journalistic sources, and class discussion. Prerequisite: RUSS—302 or equivalent. (ATTR: ARTS, ISP)

\*\*\*RUSS—402. Advanced Russian Readings and Conversation II 3 credits  
Continuation of RUSS—401. Prerequisite: RUSS—401 or equivalent. (ATTR: ARTS, ISP)

### **Spanish** **Description of Courses**

SPAN—027. Women Writers from Latin America: Literature in Translation 3 credits  
A study of selected texts by women writers from Latin America from the seventeenth century to the present, including novels, short stories and poetry, read in English translation. May not be used as part of the Spanish major. (ATTR: ARTS, CAL, CFD, GLST, MULT, WSTU)

SPAN—035. Spanish Language Study Travel-English 3 credits  
This academically oriented course will be taught in English and consists of coursework followed by an intensive travel study component in a selected Spanish-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired in class and abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will not fulfill a language requirement, nor will it count toward a major or minor in Spanish. Prerequisites: Permission of Instructor. (ATTR: ARTS, ISP, CFD, LALA, MULT, GLST)

SPAN—101. Fundamentals of Spanish I 3 credits  
This course is designed for the beginning student and emphasizes correct oral expression and fundamental language structure. In addition to the regular classroom schedule, the student has at his or her disposal a modern language laboratory. (ATTR: ARTS)

SPAN—102. Fundamentals of Spanish II 3 credits  
A continuation of SPAN—101. Prerequisite: SPAN—101. (ATTR: ARTS)

SPAN—201. Intermediate Spanish I 3 credits  
Using a variety of topics related to Hispanic culture for reading and discussion, the audio-lingual aspect of the language is further developed, and the ability to read with understanding is increased. The structure of the language is also thoroughly reviewed. Prerequisite: SPAN—101, 102 or evidence of having successfully completed at least two years of study of Spanish on the secondary level. (ATTR: ARTS)

SPAN—202. Intermediate Spanish II 3 credits  
A continuation of SPAN—201. Prerequisite: SPAN—201. (ATTR: ARTS)

SPAN—301. Communication in Spanish I 3 credits  
To increase proficiency in speaking Spanish. Prerequisites: SPAN—201, 202 or equivalent. (ATTR: ARTS, ISP)

SPAN—302. Communication in Spanish II 3 credits  
A continuation of SPAN—301 with emphasis on the development of writing skills. Prerequisite: SPAN—201, 202 or equivalent. (ATTR: ARTS, ISP)

\*\*\*SPAN—305. Spanish Language Study Travel 3 credits  
This academically oriented course will be taught in Spanish and consist of coursework followed by an intensive travel study component in a selected Spanish-speaking country. Orientation meetings, research, lectures and discussions will prepare students for an informed field experience. Upon return, students present a project/research paper and portfolio based on their cultural, historical, socio-economic knowledge acquired in class and abroad. Students may repeat this course for credit if subject matter differs. Travel costs are paid in full by students. The cost varies each semester. This course will fulfill a language requirement, it will also count toward a major or minor in Spanish. Prerequisites: SPAN-202 and permission of instructor. (ATTR: ARTS, ISP, CFD, LALA, MULT, GLST)

SPAN—320. Introduction to Hispanic Prose 3 credits

Selected readings from Hispanic literature are used. Emphasis is primarily placed on the development of critical reading skills. Discussions are conducted entirely in Spanish thus further developing the oral skills. Prerequisite: SPAN—301. (ATTR: ARTS, ISP, SPLT)

SPAN—330. Introduction to Hispanic Drama 3 credits

A study of selected works of Hispanic drama both classical and modern. Prerequisite: SPAN—301 or 302. (ATTR: ARTS, ISP, SPLT)

SPAN—340. Advanced Grammar 3 credits

A thorough study of the principles of Spanish grammar with extensive practice in composition. Designed for the advanced student. Prerequisite: SPAN—301, 320 or 330. (ATTR: ARTS, ISP)

SPAN—350. Spanish Civilization 3 credits

A survey of the main currents of the culture, literature, art, and civilization of Spain. Prerequisite: SPAN—301. (ATTR: ARTS, GLST, ISP)

SPAN—360. Spanish American Civilization 3 credits

A survey study of the main currents of the culture, literature, art, and civilization of the Spanish American countries from pre-Hispanic days to the present. Prerequisite: SPAN—301. (ATTR: ARTS, GLST, ISP, MULT)

SPAN—370. Advanced Spanish Conversation and Composition 3 credits

Advanced study of the language through intensive practice of oral and written Spanish. Students will increase fluency in spoken Spanish through active work on vocabulary and pronunciation, and further refine writing skills through writing and editing compositions. Native Spanish speakers need permission of the instructor.

SPAN—400. Topics in Spanish 3 credits

This course will explore topics not normally treated in regular Spanish courses. This course may be taken more than once with different content and it is intended for the advanced student in Spanish. (ATTR: ARTS)

SPAN—401. Spanish Literature I 3 credits

A survey of Spanish literature. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

SPAN—402. Spanish Literature II 3 credits

A survey of Spanish literature. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—410. Drama of the Nineteenth Century 3 credits

This course examines representative dramas from Moratin to Benavente. Plays selected illustrate all the important literary movements of the past century. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—420. Novels of the Nineteenth Century 3 credits

This course examines representative novels from Alarcon to Galdos. Works chosen demonstrate the important literary currents of the past century. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—430. Literature of the Twentieth Century 3 credits

A study of Spanish literature from the Generation of '98 to the contemporary period. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—440. Drama of the Golden Age 3 credits

A chronological study of the development of the drama from Cervantes to Calderon. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—450. Don Quixote 3 credits

A detailed study of this great work and its importance in the development of the modern novel. Lectures, readings, reports. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, SPLT)

\*\*\*SPAN—460. Representative Latin American Authors 3 credits

A general survey of Latin American literature from its origins to the contemporary period. Prerequisite: SPAN—320 or SPAN—330. (ATTR: ARTS, ISP, MULT, SPLT)

\*\*\*SPAN—495. Independent Study in Spanish 1 - 3 credits

A Spanish major may work independently on a topic of special interest. The student consults with the professor with whom he/she decides on a study that will permit a definite accomplishment by the end of the semester. This study must be approved by the Department Head and the Dean of Liberal Arts. In a term paper or essay he/she is expected to demonstrate familiarity with the tools basic to his/her study, and an awareness of the methods appropriate to pursuing his/her interest. (ATTR: ARTS, ISP)

## **Classics**

### **Latin**

#### **Description of Courses**

LATN—101. Elementary College Latin I 3 credits

An intensive study of Latin grammar and vocabulary with emphasis on learning to read simple Latin. This is the first course for students offering less than two entrance units in Latin. A student must complete LATN—101 (or the equivalent) in order to register for LATN—102. (ATTR: ARTS)

LATN—102. Elementary College Latin II 3 credits

A continuation of LATN—101. Prerequisite: LATN—101 or permission of instructor. (ATTR: ARTS)

LATN—201. Intermediate Latin 3 credits

A course consisting of selections from representative classical authors. Important grammatical constructions are reviewed. This course is recommended for students who have completed Elementary Latin. (ATTR: ARTS)

LATN—250. Topics in Latin 3 credits

Study of a foundational level topic. Subject matters will be made public in the official announcements which precede registration. This course may be taken more than once with different content. Prerequisite: LATN—201 or permission of instructor. (ATTR: ARTS)

LATN—300. Advanced Topics in Latin 3 credits

Study of an advanced level topic. Subject matters will be made public in the official announcements which precede registration. This course may be taken more than once with different content. Prerequisite: LATN—201 or permission of instructor. (ATTR: ARTS)

LATN—495. Independent Study in Latin 1 - 3 credits

Qualified students are invited to pursue a special project in Latin of their own choosing, with the approval of the Department. (ATTR: ARTS)

### **Greek**

#### **Description of Courses**

GREK—101. Elementary Greek I 3 credits

An intensive study of Ancient Greek grammar and vocabulary with practice in translating simple Greek. A student must successfully complete GREK—101 (or the equivalent) in order to register for GREK—102. (ATTR: ARTS)

GREK—102. Elementary Greek II 3 credits

A continuation of GREK—101. Prerequisite: GREK—101 or permission of instructor. (ATTR: ARTS)

GREK—201. Intermediate Greek 3 credits

This course consists of reading selections from representative authors of Classical Greek, for students who have completed elementary Greek. (ATTR: ARTS)

GREK—250. Topics in Greek 3 credits

Study of a foundational level topic selected on the basis of faculty and student interest. Subject matters will be made public in the official announcements that precede registration. This course may be taken more than once with different content. Prerequisite: GREK—201 or permission of the instructor. (ATTR: ARTS)

GREK—300. Advanced Topics in Greek 3 credits

Study of an advanced level topic selected on the basis of faculty and student interest. Subject matters will be made public in the official announcements that precede registration. This course may be taken more than once with different content. Prerequisite: GREK—201 or permission of the instructor. (ATTR: ARTS)

GREK—495. Independent Study in Greek 1 - 3 credits

Qualified students are invited to pursue a special project in Greek of their own choosing, with the approval of the Department Head. (ATTR: ARTS)

### **Classical Studies** **Description of Courses**

CLSS—105. The Greeks 3 credits

It has often been noted that the Western tradition stands upon two great pillars: the Greco-Roman and the Judeo-Christian traditions. This course will give the student a broad introduction into the culture and civilization of the Greek people and how they still influence us. Within the course students will study the broad lines of Greek history, the major literary figures and their works, the principal ideas and institutions that informed Greek society, the great achievements in art and architecture, Greek religious practice, and the ways in which the ancient Greeks live on into the present day and why they still command our attention. (ATTR: ARTS, CFH)

CLSS—110. The Romans 3 credits

It has often been noted that the Western tradition stands upon two great pillars: the Greco-Roman and the Judeo-Christian traditions. This course will give the student a broad introduction into the culture and civilization of the Roman people and how they still influence us. Within the course students will study the broad lines of Roman history, the major literary figures and their works, the principal ideas and institutions that informed Roman society, the great achievements in art and architecture, Roman religious practice, and the ways in which the ancient Romans live on into the present day and why they still command our attention. (ATTR: ARTS, CFH)

CLSS—210. Women in Antiquity 3 credits

A study, using a variety of methods and differing kinds of material including tragedies, comedies, lyric poetry, historical writings, lawcourt speeches, funeral stele, vase and fresco paintings, sculpture, medical treatises, etc., to recover as clear a reflection of the feminine voice from the Greco-Roman past as possible and to understand not only the role or position of women in antiquity, but the very meaning of "woman" for the ancients. Among the works by women writers that are extant we may include the poets Sappho, Corinna, Erinna, Nossis, and Sulpicia; early Hellenistic treatises attributed to Pythagorean women; private correspondence; Egeria's 5th-cent. C.E. travel diary. (Same as WSTU—200) (ATTR: ARTS, CAH, WSTU)

CLSS—220. Greek Literature in Translation 3 credits

A survey of Greek literature in English translation from the Homeric to the Hellenistic Age. (Same as ENGL—051) (ATTR: ARTS, CAL, ELIT, ENUL, CFH)

CLSS—225. Latin Literature in Translation 3 credits

A survey of the literature of Republican and Imperial Rome. (Same as ENGL—055) (ATTR: ARTS, CAL, ELIT, ENUL, CFH)

CLSS—240. Greek Archeology and Art 3 credits

An introductory survey focusing on major archeological sites and significant developments in architecture, painting, pottery and sculpture from the Minoan-Mycenaean period to the Hellenistic Age. (ATTR: ARTS, CAA, CFH)

CLSS—245. Roman Archeology and Art 3 credits

An introductory survey focusing on major archeological sites such as Pompeii and Herculaneum, the topography and monuments of Rome, and the character of Roman achievements in architecture, painting, sculpture, engineering, and technology. (ATTR: ARTS, CAA, CFH)

\*\*\*CLSS—250. Topics in Classics 3 credits

Study of a foundational level topic selected on the basis of faculty and student interest. Subject matters will be made public in the official announcements that precede registration. This course may be taken more than once with different content. Prerequisite: permission of instructor. (ATTR: ARTS)

CLSS—260. Gods and Goddesses 3 credits

A study in English of the Greco-Roman myths that treat the origin of the world, the generations of the gods, the creation of the human race, and the relationship between mortals and immortals. Also examined will be ancient notions of worship, including the importance of sacrifice and mystery cults. Different, contemporary, theoretical perspectives will be employed to interpret the meaning conveyed by these stories both for the ancients and for the modern world and to evaluate their force in the development of Greek and Roman culture, literature, and art and their subsequent influence on later peoples. (ATTR: ARTS, CAR, CFD)

CLSS—265. Heroes and Heroines of Saga 3 credits

A study in English of the Greco-Roman myths that deal with the heroes and heroines of the Greek royal houses, of the Trojan War, of the journey home; the legends involving Theseus, Heracles, Perseus, and Jason; certain local traditions of myths; the transformation of the Greek heroic tradition among the Romans, in particular that of the Trojan Aeneas; theoretical perspectives will be used to understand ancient conceptions of heroism and how they have influenced the later tradition. (ATTR: ARTS)

CLSS—270. Classical Roots of English 3 credits

A study of etymology and basic linguistics in order to understand the nature and structure of English words derived primarily from Greek and Latin. The vocabulary of the arts, politics, and humanities is analyzed as well as that of medicine, law, and the sciences. (ATTR: ARTS)

\*\*\*CLSS—300. Advanced Topics in Classics 3 credits

Study of an advanced level topic selected on the basis of faculty and student interest. Subject matters will be made public in the official announcements that precede registration. This course may be taken more than once with different content. Prerequisite: permission of instructor. (ATTR: ARTS)

CLSS—305. Greek Civilization 3 credits

A survey of the social, cultural, and political developments of the Ancient Greeks, beginning with the Minoan-Mycenaean and continuing from the Homeric through the Hellenistic Age. (Same as HIST—335) (ATTR: ARTS, CAH, HEUR, PNH, CFD)

CLSS—306. Roman Civilization 3 credits

A survey of the social, cultural, and political development of Rome from its foundation to the fall of the Empire. (Same as HIST—336) (ATTR: ARTS, CAH, HEUR, PNH, CFD)

CLSS—310. Alexander the Great and the Hellenistic Age 3 credits

Alexander succeeded to the throne of Macedonia (Greece) at the age of twenty. He quickly led his united Greek forces eastward and within twelve years his empire stretched from Greece in the west to India in the east. Today, Alexander the Great is recognized by military experts as having been one of the most gifted military strategists in history. First, close attention will be paid to Alexander the Great's military career but we shall also examine Alexander the man; his character, motives, and philosophical goals. Second, his early death in 323 BCE marked the birth of the Hellenistic Age, an age that profoundly influenced the history of the western world through its contact with the Roman empire. We shall devote approximately half the course to the study of the achievements of the Hellenistic Age, especially the Hellenistic Ptolemaic dynasty in Egypt, whose last ruler was Cleopatra VII. A variety of resources will be used including primary and secondary sources, together with slide presentations. (ATTR: ARTS, CAH)

CLSS—315. Augustus and the Augustan Age 3 credits

By the mid-1st Century BCE, Rome had become the most powerful military and political force in the ancient world. At that time, Roman territory stretched from Spain in the west to lands bordering ancient Mesopotamia in the east. This empire had been won by Rome while under a republican form of government that had existed for over 400 years. However, at the very point at which Roman power reached its zenith, its republican government collapsed, giving way to rule by Rome's first emperor, Augustus. In this course we will study in detail the political and social conditions that prevailed during this pivotal era in which Rome was transformed from a republic to a principate. In addition, we will study the literature, art, and architecture of the Augustan Age. A variety of resources will be used including primary and secondary sources, together with slide presentations. (ATTR: ARTS, CAH)

CLSS—320. Greek Tragedy 3 credits

A study in English of the masterpieces of Aeschylus, Sophocles, and Euripides, through a close reading of individual works of the tragedians and the fruits of modern scholarship. Among the subjects treated will be the history and origins of Greek tragedy, the physical space of the ancient theater, aspects of performance (the tragic mask, acting techniques, etc.), the location of individual play within their historical context, and the later influence of these plays. (ATTR: ARTS, CAL)

CLSS—330. Ancient Epic 3 credits

A study of the epic narratives of Greece and Rome, including among others, Homer's Iliad and Odyssey, Apollonius' Argonautica, Vergil's Aeneid, and Ovid's Metamorphoses. A variety of interpretive approaches will be used in a close reading of the primary texts. The course will focus on the development and transformation of

the epic tradition throughout the course of antiquity, its shifting focus, themes, values, methods, cultural assumptions, and its legacy to western civilization. (ATTR: ARTS, CAL)

**CLSS—340. Late Antiquity 3 credits**

The study of Late Antiquity will investigate the fundamental period of transition from the classical to medieval world as it was experienced across the Mediterranean. Spanning the crises of the Late Roman Empire to its disintegration, it will encompass diverse areas of inquiry: the establishment of Christianity within the Roman empire; the barbarian migrations and the ensuing destabilization of the Roman Empire in the west; the emergence of the papacy and the rise of the Frankish king, Charlemagne as a new emperor; the continuity of the Roman Empire in the east through the successors of Augustus who ruled the "Byzantine" Empire from Constantinople; the emergence of the Islamic caliphate and the founding of Bagdad. Same as HIST—337. (ATTR: ARTS, HEUR, MRST, PNH)

**CLSS—360. The Spartans 3 credits**

Students will study the history and culture of Sparta from its beginnings ca. 1,000 BCE to its eventual collapse in the 4th Century BCE. The name Sparta has survived in the cultural memory of the west for more than 2,000 years in no small part due to its reputation for heroism and military might. We will examine the character of Spartan society and its emphasis on the heroic ideal. Students will learn how this ideal evolved, and how it enabled Sparta to become the most powerful state in ancient Greece. We will learn that Sparta's truly unique military, social and political systems came at a heavy price; this aspect of Spartan culture will constitute another major focus of the course. Our examination of Sparta and its history will be based on evidence derived from primary sources, archaeology, art and secondary sources. (Same as HIST—338) (ATTR: ARTS, HEUR, PNH)

**CLSS—495. Independent Study in Classics 1 - 3 credits**

Qualified students are invited to pursue a special project in Classics of their own choosing, and with the approval of the Department. (ATTR: ARTS)

## **Philosophy Department**

Chair: Dr. Jennifer McErlean, Prof.

Prof.: Dr. Raymond Boisvert, Dr. John S. Burkey, Fr. Julian A. Davies, O.F.M., Dr. Paul C. Santilli

Asst. Prof.: Dr. Joshua Alexander, Dr. Karen Ng, Dr. Fanny M. Söderbäck

Philosophy helps students to view themselves and their relationships to others, the world, and God in a responsible and intelligent manner. The function of the Department's core courses is to stimulate and expand students' thoughts about such themes as humanity, justice, freedom, the nature of reality, and God. These courses contribute to intellectual growth and maturity by providing a perspective from which to see human life as a unified whole. Philosophical study introduces students to the rich tradition of ideas that has shaped western culture. Moreover, philosophy stresses logical thinking, analysis, sound argument, and clear writing, thus providing skills necessary for success in any career. Majors in philosophy typically score high in standard professional tests and go on to careers in law, business, journalism, higher education, religion, and government. Philosophy majors also have great flexibility when choosing electives in other fields.

**Requirements for the Major. B.A. in Philosophy ( 33.000 credits ):**

PHIL 101 - Philosophy and the Human Being\* **OR**

PHIL 103 - Reason and Argument\*

3 cr.

\*Only one of these may count towards the major.

PHIL 155 - Logic

3 cr.

PHIL 210 - Ethics

3 cr.

PHIL 290 - Greek and Roman Philosophy

3 cr.

PHIL 294 - Early Modern Philosophy

3 cr.

One History of Philosophy course from:

3 cr.

PHIL 342 - Medieval Philosophy

PHIL 346 - Late Modern Philosophy

PHIL 348 - Existentialism

PHIL 350 - Philosophical Influences on Theology

PHIL 400 - Philosophy of Language and Mind

PHIL 420 - Classic American Philosophy

PHIL 440 - Phenomenology

**Either** PHIL 450 and PHIL 490: **OR** 3 cr. each  
PHIL 491 - Symposium on Living Philosophers 6 cr.  
(PHIL 491 must be taken for two semesters. The student earns three credits per semester, six total over the one year.)

Philosophy Electives 9 cr.  
\*Electives to be selected in consultation with departmental advisor.

**Requirements for the Minor, Philosophy (18.000 credits):**

PHIL 101 - Philosophy and the Human Being\* **OR** 3 cr.  
PHIL 103 - Reason and Argument\*  
\*Only one of these may count towards the minor.

PHIL 155 - Logic 3 cr.  
PHIL 210 - Ethics 3 cr.

Philosophy Electives\* 9 cr.  
\*Electives to be selected in consultation with departmental advisor.

### Description of Courses

All students must take the College core disciplinary requirement in philosophy, which can be fulfilled by either PHIL—101, Philosophy and the Human Being, or PHIL-103, Reason and Argument. Either of these serves as the prerequisite for all other courses in philosophy, but only one of the disciplinary courses can count towards a major in Philosophy. *It is suggested that PHIL 101 or 103 be completed by the end of the sophomore year.*

**PHIL—101. Philosophy and the Human Being 3 credits**

An introduction to philosophy focusing on various themes pertaining to human existence. The subjects treated include knowledge, community, beauty, love, freedom, and justice. Also examined are questions concerning the body and the soul, the meaning of life and death, and the individual's relation to God. The figure of Socrates is prominent, but philosophers from a variety of historical periods and traditions are also studied. (ATTR: ARTS, CDP)

**PHIL—103. Reason and Argument 3 credits**

What makes one argument acceptable and another unacceptable? What makes one inference reasonable and another unreasonable? Philosophers employ a variety of methods for studying argument and inference, and this course will introduce students to some of these methods. Students should come away from the course with a better understanding of the nature of argumentation and our capacity for reason, along with strong skills in critical thinking that can be applied to personal, intellectual, and academic pursuits. (ATTR: ARTS, CDP)

**PHIL—155. Logic 3 credits**

This course is an introduction to logic for students of contemporary philosophy and its allied fields (mathematics, computer science, political science, social and cognitive science, etc.) It is intended for beginning students and covers: basic formal approaches to standard propositional and predicate logic, together with philosophically important extensions of standard deductive logic; basic formal approaches to inductive logic; and elementary philosophy of logic. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, PLG)

**PHIL—202. Philosophy and Reality 3 credits**

The most comprehensive and fundamental questions about reality are pursued in this course. Examples are the origin and makeup of the cosmos, the existence of such "things" as minds, God, freedom, evil, space, and time. The course explores concepts that philosophers, scientists, and theologians rely on to express their respective accounts of such enduring questions. These topics are pursued through both historical and contemporary readings. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP, CFH)

**PHIL—210. Ethics 3 credits**

A philosophical study of ethical questions such as: How are we to live? What kind of people should we become? Typically examines virtue ethics, Kantianism, natural law theory, justice and rights theories, and utilitarianism. Applies theories to contemporary moral and political concerns. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP, CFJ, HSMR, ISP)

PHIL—215. Philosophical Perspectives on Diversity 3 credits

The course examines the role that human differences such as race, ethnicity, gender, disabilities, sexual orientation, and class have in the philosophical conception of the human being from ancient to modern times. Among the themes that may be studied are master and slave, human and inhuman, being and non-being, the visible and the invisible, whiteness and darkness, male and female, the normal and the perverse. The course also wrestles with contemporary criticisms of binary thinking that divides the human family into an “us” and an “other”. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFD)

PHIL—220. Philosophies of Love 3 credits

This course examines an idea that has fascinated philosophers for all time. The subject of love will be studied historically, with readings from ancient, modern, and contemporary sources. Literature and films may be used along with philosophical texts. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP)

PHIL—225. Social and Political Philosophy 3 credits

This course introduces students to the various formulations that social and political philosophies have taken as humans attempted to shape their cultural lives in terms of some idea of the good. Since “justice” is often the formulation for the highest social/political good, the course will emphasize this concern. Major philosophers from various times and cultures will be studied. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFJ)

PHIL—240. Philosophy of Aesthetics 3 credits

This course in Aesthetics explores the nature of art and its relationship to society, truth, and human experience. Questions to be explored include: the meaning and place of art; its role in education; its relations to reality; and the nature of beauty. Examples will be drawn from a variety of artistic media, including painting, sculpture, dance, film, photography, music, literature, drama, architecture, and conceptual art. Thinkers typically considered are Plato, Aristotle, Kant, Schiller, Hegel, Nietzsche, Dewey, Benjamin, Danto, and Cavell. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP, CFD)

PHIL—260. Philosophy of Religion 3 credits

An examination of fundamental questions about the nature and significance of religion. Central issues to be studied are: religion as reasonable form of life; religious skepticism; pluralism in religion; arguments for the existence of God; the impact of science on religious belief; the place of ritual and symbolism in human life; and religious language. Traditional and contemporary texts will be read. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP)

PHIL—270. Philosophy of Law 3 credits

This course provides a general introduction to philosophical questions concerning law. Among these questions are: Why does law exist? Can laws be broken morally? Why should anyone obey laws? What kinds of laws are there and how do they differ from rules and regulations? What makes punishing criminals right? These issues will be examined through a variety of writings from great historical figures such as Plato, Aquinas, Locke, and Mill, and contemporaries like Hart and Dworkin. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP, JMN, CFJ)

PHIL—285. Philosophy and Gender 3 credits

This course examines the relationship between, and the making, of sex and gender. It tackles the question of how we are and become sexual beings, and critically explores the fluid boundary between the biological and the social. Is gender a cultural construction? Or are there essential differences between women and men; ones that we should embrace rather than reject? If gender is made, can it be unmade? Are there two or multiple genders? Is our gender located in the body or is it psychological? Major historical figures as well as contemporary feminist philosophers will be studied. Examples from film and media may be used to stimulate discussion. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, WSTU)

PHIL—290. Greek and Roman Philosophy 3 credits

Explores the origin and sequence of ancient philosophy from the pre-Socratics through Socrates, Plato and Aristotle, and Hellenistic and Roman successors. Emphasis on careful study of fragments from early Greek thinkers, Platonic dialogues, major works by Aristotle, and later Epicurean and Stoic writings. Questions elucidate the discovery of nature, being, becoming, and areas of human knowledge and ethics. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFH, PHY)

PHIL—294. Early Modern Philosophy 3 credits

European philosophy of the 17<sup>th</sup> and 18<sup>th</sup> centuries. Main figures include Descartes, Hobbes, Spinoza, Locke, Leibniz, Hume, and Kant. Typical questions pertain to the method proper to philosophy; the origins, nature, and

limits of human knowledge; modern subjectivity and selfhood; and the nature of moral thinking and acting. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFH, PHY)

PHIL—300. Philosophy and Knowledge 3 credits

Epistemology is the study of knowledge, justification, and rational belief. Topics may include: skepticism; theories of knowledge and justification; the structure of knowledge and justification; sources of epistemic normativity; the value of knowledge; rationality and epistemic responsibility; testimony, memory, and perception; and, rationalism, empiricism, and pragmatism. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS)

PHIL—320. Philosophy of Nature 3 credits

Examination of the idea of nature in a historical and contemporary perspective, including theories of humanity's place in and transformation of the natural world. Some points of emphasis are the legacy of ancient cosmology, the development of the scientific view of nature, modern technology, and current ecological theory. Prerequisite: PHIL—101 or PHIL—103. (Same as ENVA—320). (ATTR: ARTS, CAP, CFN)

PHIL—330. Philosophy of Science 3 credits

This course examines various aspects of science from a philosophical perspective. Topics may include: scientific explanation; causation; induction, confirmation and underdetermination; realism and the nature of theories; scientific change and rationality; and science, culture, and society. Thinkers to be considered may include Hempel, Popper, and Kuhn. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP)

PHIL—333. Special Topics in Philosophy 3 credits

An opportunity to explore areas and topics not covered in the regular philosophy offerings, depending on student and faculty interest. Examples include "Philosophy and Psychology" and "The Morality of War and Killing." This course may be taken more than once with different content. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS)

PHIL—342. Medieval Philosophy 3 credits

Medieval Philosophy is the study of foundational ideas discussed by thinkers such as Augustine, Anselm, Aquinas, and Bonaventure. Also included are a look at Islamic and Jewish philosophers who took the ideas of Aristotle and used them to understand God, humans, and the world. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, PHY, CFH)

PHIL—346. Late Modern Philosophy 3 credits

European philosophy of the 19<sup>th</sup> century. Main figures are Hegel, Marx, Kierkegaard, and Nietzsche. Typical questions pertain to the role of history in shaping our self-understanding in science, religion, and politics; and the emergence of radical critiques of modern culture. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFH, PHY)

PHIL—348. Existentialism 3 credits

The philosophy of 20<sup>th</sup> century Existentialism and its 19<sup>th</sup> century origins. Main figures include Kierkegaard, Nietzsche, Heidegger, Marcel, Camus, Sartre, and Beauvoir. Typical questions pertain to freedom, death, responsibility, absurdity, and the meaning of existence in theistic and atheistic contexts. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CAP, PHY, CFH)

PHIL—350. Philosophical Influences on Theology 3 credits

A survey of selected philosophers and philosophical schools of thought and their influence on Christian Theology, Christian beliefs and practices. Selection will generally follow a time period, e.g. Ancient, Modern and Contemporary. This course may be repeated for credit when the selected material differs. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, PHY)

PHIL—400. Philosophy of Language and Mind 3 credits

This course covers two areas central to the development of analytic philosophy in the 20<sup>th</sup> century: the philosophy of language and the philosophy of mind. Topics in the philosophy of language may include: truth and meaning; speech acts; reference and descriptions; names and demonstratives; propositional attitudes; metaphor; and interpretation. Topics in the philosophy of mind may include: the mind-body problem; mental causation; mental content; innateness and modularity; and associationism and connectionism. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, PHY)

PHIL—420. Classic American Philosophy 3 credits

"Classic American Philosophy" identifies a movement in which Americans declared their independence from European philosophies. Pragmatism is the most famous school, but there were other developments as well. This course studies some of the key philosophers who contributed to an American philosophical voice. Typical of the philosophers studied: Pierce, James, Dewey, Addams, Santayana, Du Bois, Royce, Whitehead, Rorty. Prerequisite: PHIL—101 or PHIL—103. (ATTR: AMSC, ARTS, PHY)

PHIL—440. Contemporary Continental Philosophy 3 credits

The major movements of the 20<sup>th</sup> century European thought such as phenomenology, hermeneutics, structuralism, deconstruction, feminism, and psychoanalysis. Major figures include Husserl, Heidegger, Arendt, Gadamer, Levinas, Foucault, Derrida, Deleuze, Irigaray, and Kristeva. Typical questions pertain to problems of consciousness, language, embodiment, power, and otherness. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, PHY)

PHIL—450. Great Figures in Philosophy 3 credits

This seminar is devoted to the study of individual thinkers whose work has contributed to shape the world's philosophical traditions. Based on primary texts, its goal is to reconstruct the genesis of key ideas, the lines of continuity and rupture in the corpus of a single author, and the impact those have had on other thinkers. Students in this seminar will be responsible for producing a substantial research paper evidencing philosophical methodology and knowledge. Students may take this course for credit more than once if the content differs. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS, CFH)

PHIL—490. Seminar 3 credits

This class may feature a special philosophical problem, a philosophical tradition, or the works of an individual philosopher selected for intensive study, with special emphasis on primary sources. Students in this course will be responsible for presenting material to the class and for producing a substantial research paper evidencing philosophical methodology and knowledge gained from courses throughout the discipline. Prerequisite: PHIL—101 or PHIL—103. (ATTR: ARTS)

PHIL—491. Symposium on Living Philosophers 3 credits

This is a yearlong seminar extending through the Fall and Spring semesters and focusing on the work of a major contemporary philosopher. The course is taught by two Siena faculty members, and includes the regular participation of an external scholar, public lecture series, and visitations by the featured philosopher that culminate in a public panel discussion during the spring semester. Students are expected to produce a substantive research paper, give oral presentations, and belong to a community of research with faculty. The course entails six credits (three credits repeatable one time for full credit), and can be counted as the seminar requirement towards majoring in philosophy. Permission of the program directors is required to participate. The Symposium may be taken for credit more than once. (ATTR: ARTS)

PHIL—495. Directed Research 1 - 3 credits

A qualified student, with the approval of a faculty mentor and the department, may work under close supervision to join a research project conducted by a faculty member. Participating in research will include activities such as the following: conducting extensive library research, providing annotated summaries, attending local colloquia, reviewing manuscripts. Students will be required to keep a log of their activities and to prepare a narrative report upon completion of the semester. This course can be taken only on a pass/fail basis. (ATTR: ARTS)

PHIL—499. Independent Study 1 - 3 credits

Open to juniors and seniors who wish to work independently on a topic of special interest, with the approval of an instructor and the department. The topic will be pursued through private discussion, independent reading, an extensive written report, and an oral examination by two members of the department. (ATTR: ARTS)

## **Political Science Department**

Chair: Dr. Leonard M. Cutler, Prof.

Prof.: Dr. Vera Eccarius-Kelly, Dr. Leon Halpert, Dr. Jean M. Stern

Assoc. Prof.: Dr. Laurie Naranch

Asst. Prof.: Dr. Daniel Lewis, Dr. Salvatore Lombardo, Dr. Ausra Park

The Political Science curriculum provides students with a comprehensive understanding and appreciation of the study of politics. Students will obtain basic knowledge within and across the principal fields of the discipline;

think critically about the enduring issues of politics while studying political institutions, processes, behaviors, attitudes and value systems; and develop a variety of research skills.

Students who major in Political Science or who complete substantial coursework in the department will have a foundation for future careers or graduate study in such areas as law, government service, public policy and administration, international affairs, teaching, journalism, and public, private and non-profit service sectors. Internships, independent study projects and honors courses provide students with in-depth learning opportunities. The program also serves as a basis for knowledgeable and concerned citizenship for those who choose not to concentrate in political science.

**Requirements for the Major, B.A. in Political Science ( 36.000 credits ):**

POSC 100 - Contemporary U.S. Politics	3 cr.
POSC 130 - Political Theory	3 cr.
POSC 140 - Comparative Politics	3 cr.
POSC 150 - World Politics	3 cr.
POSC 178 - Political Research I	4 cr.
POSC 182 – Political Research II	4 cr.
POSC 495 – Capstone Prep Seminar	1 cr.
POSC 497 – Senior Capstone Thesis	3 cr.
Political Science Electives	12 cr.

Students complete the Portfolio Review with their advisor in the spring semester of their sophomore year.

**Requirements for the Minor, Political Science (18.000 credits):**

2 courses at the introductory level from POSC 100 through 180	6 cr.
4 courses at the elective level from POSC 205 through 378	12 cr.

A Political Science Internship may substitute for one elective course.

A Washington Semester may substitute two of POSC 790 through POSC 797 for up to two courses at the elective level.

### Description of Courses

POSC—100. Contemporary U.S. Politics 3 credits

This course is an overview of the major institutions and processes of the American political system. Both formal (i.e., Congress, the Presidency, and the Judiciary), and informal (e.g., political parties, interest groups, the media, etc.) institutions will be covered. It is designed to help the students not only acquire a basic knowledge of American government, but also develop the ability to critique and analyze it. (ATTR: AMSB, ARTS, CAS, CDS)

POSC—130. Political Theory 3 credits

Political theory provides conceptual clarification evaluating what is just in the context of power in political life. This course introduces you to the field of political theory by focusing on social justice concepts such as equality, freedom, rights, power, law, diversity, and morality. In this course, we will approach political theory through attention to: 1. the historical location of ideas, 2. the literary or rhetorical nature of our texts, and 3. matters of contemporary relevance for thinking about political experiences today. We will read both classics in the field as well as important contemporary thinkers. (ATTR: ARTS, CAP, CFJ)

POSC—140. Comparative Politics 3 credits

An introductory course establishing comparative models of political systems focusing upon socio-political organization, political socialization, decision-making and public policy in selected states. (ATTR: ARTS, CAS, ISP, M CCP)

POSC—150. World Politics 3 credits

A study of the interactions between members of the international system to provide for military, economic, environmental, and social security. Concepts such as power, international law, international organization, human rights, sustainable development, collective security, and national security are examined. (ATTR: ARTS, CAS, CFJ, GLST, ISP)

POSC—178. Political Research I 4 credits (3 lecture, 1 lab)

This course is the first part of a two course research methods sequence. It provides an overview of the political science discipline, its evolution, and its subfields. Students are introduced to the systematic, empirical approach to the study of politics, and are alerted to the ethical issues that may arise when doing social science research. In this course students are also introduced to various qualitative approaches to data collection and analysis. Three hours lecture, one hour lab. Lab fee. (ATTR: ARTS)

POSC—180. Political Research 4 credits

Examines assumptions of major theoretical approaches and implications for empirical research in Political Science including concept formation, survey and research design, and data analysis. Laboratory required one hour per week. (ATTR: ARTS)

POSC—182. Political Research II 4 credits

This course is the second part of a two course research methods sequence. It includes in-depth coverage of several quantitative approaches to political science research. Particular attention will be given to survey research, experiments and quasi-experiments, and the use of aggregate data. A broad range of descriptive and inferential statistics techniques are also covered in this course. Prerequisite: POSC-178.

POSC—205. State and Local Government 3 credits

An examination of American state and local political systems, emphasizing such topics as federalism and intergovernmental relations, federal grant-in-aid systems, the state gubernatorial, legislative and judicial process, local political systems, and public policies of state and local governments. (ATTR: AMSB, ARTS, CDS)

POSC—218. Women and Politics 3 credits

This course examines the role of women in politics in terms of the broad political questions of participation, political socialization, social movements, and public policy. Prerequisites: Sophomores or above. (ATTR: ARTS, CFD, WSTU)

POSC—230. Classical and Medieval Political Theory 3 credits

This course is designed as an introduction to both Classical and Medieval political theory as a discipline and to the political culture of the European West. We will explore an assortment of works, including both conventional and unconventional (or less well-known writers). Our most important goals are to examine how these writers understood themselves and their society, and how that understanding affected ideas about justice, the nature of power, rule, law, and obligation. We will also examine why these works, among others, came to be considered the foundation of Western political thought. Prerequisite: POSC—130 or Juniors or above. (ATTR: ARTS)

POSC—250. United Nations 3 credits

Purposes and principles of the United Nations with politics, law, structure, voting, and policies of member states explored. Prerequisite: Sophomores or above. (ATTR: ARTS, GLST)

POSC—254. Children in War and Work 3 credits

The decisions made in international relations today affect the childhood experiences of the next generation of leaders and hence will greatly shape how the world will react to impending issues dealing with war and prosperity. This course examines both the impact of war and work on children and discusses and evaluates various policies for dealing with children in these situations. (ATTR: ARTS, GLST)

POSC—257. Terrorism: Causes and Cures 3 credits

This course will examine the evolution of terrorism, its causes, perpetrators, and methods. It will also evaluate the various national and international methods used for dealing with terrorism. (ATTR: ARTS, GLST)

POSC—260. Public Administration 3 credits

The course has four key objectives: First, to give students an overview of the intellectual heritage of public administration and decision making theory, federalism, bureaucratic power, administrative ethics and reforms. Second, to make students familiar with the public policy process, particularly with policy implementation. Third, to convey the basic tools and knowledge of the profession, especially budgeting, personnel, management and leadership. Finally, to familiarize students with current and possible future debates within public administration, including privatization, devolution, democratizing decision making and the global economy. Prerequisite: POSC—100 or Juniors and above. (ATTR: ARTS, HSMR)

POSC—265. Public Policy 3 credits

Public Policy studies the actions or outputs of government and the goals and intentions that motivate them. In the late 20th century, government has grown to the extent that virtually every individual, in every aspect of life, is affected by government choices. In this course, we will discuss the process of making public policy primarily by examining major substantive policy areas. From this study, we will be able to identify patterns in policy making as a whole. Prerequisite: POSC—100 or Juniors or above. (ATTR: ARTS, FSPS, HSMR)

**POSC—305. Metropolitan Government 3 credits**

The course examines the history of metropolitan government, from machine politics to reform politics and current governing trends regarding regionalism and privatization. In addition, the course examines policy and ethical issues that are faced by urban areas, including economic development, racial and economic equality and urban sprawl. Prerequisite: POSC—100 or Juniors and above. (ATTR: AMSB, ARTS)

**POSC—310. Interest Group Politics 3 credits**

A critical evaluation of the impact of interest group politics on the American policy-making process. The course includes a study of the various theories of the power of interest groups, the formation and development of interest group organizations and movements and the organizational maintenance of interest groups. Also, the course examines the roles interest groups play in shaping public attitudes, influencing campaigns and elections and lobbying political institutions and officials. Students should have a working knowledge of American government. Prerequisite: Sophomores or above. (ATTR: ARTS, FSPS)

**POSC—313. American Political Parties 3 credits**

An analysis of the development, organization and functions of American Political Parties. The course examines political parties as organizations, the party in the electorate and the party in government. Particular attention is paid to how well political parties perform the linkage role between the American people's preferences and the content of governmental policy decisions. Students should have a working knowledge of American government. Prerequisite: Sophomores or above. (ATTR: AMSB, ARTS)

**POSC—315. U.S. Congress 3 credits**

The course will examine principles, structures, procedures, and decision-making of the American legislative system with a primary emphasis on the U.S. Congress. Prerequisite: POSC—100 or Juniors or above. (ATTR: AMSB, ARTS)

**POSC—320. The American Presidency 3 credits**

The origin and development of the contemporary roles of the President as a decision maker and the importance of the presidency in the American Political System. Studies examining the selection process and the relationship between presidents and other decision-making actors, such as the Congress, interest groups, the courts and the bureaucracy, will be used to inform the students to help critically analyze both continuity and changes in the influence of the office. Prerequisite: POSC—100 or Juniors or above. (ATTR: AMSB, ARTS)

**POSC—325. Public Opinion 3 credits**

This course is an introduction to the study of public opinion. The course explores the origins of public opinion (political socialization; socio-demographic, personality, and political influences; and the mass media). The course will also cover public opinion polls and survey research techniques. Finally, the course will study the impact of public opinion on policy makers and public policy. Prerequisites: POSC-100. (ATTR: ARTS)

**POSC—329. Special Studies in American Politics 3 credits**

The study of select problems such as equality, minority rights, majoritarianism, and participatory democracy in the light of the theory and practice of the American political system. (May be taken more than once with different content. Consult Fall and Spring Schedules for specific topics.) Prerequisite: POSC—100 or Juniors or above, or by permission. An additional fee may be required, depending on the topic offered. (ATTR: ARTS, REB)

**POSC—339. Special Studies in Political Theory 3 credits**

This course explores major issues in political thought through the writings of selected political philosophers. Prerequisite: POSC—130 or Juniors or above. (ATTR: ARTS, REB)

**POSC—341. Post Soviet Politics 3 credits**

A study of the political cultures and institutions of the newly independent states that were once part of the Soviet empire. The course includes discussions of modernization and adaptation as well as problems of ethnicity, race, and political socialization. Prerequisite: POSC—140 or Juniors or above. (ATTR: ARTS, ISP)

**POSC—343. European Politics 3 credits**

This course is designed as an analysis of political institutions in Western Europe. Topics to be addressed include the impact of the welfare state and dilemmas of governing in post-modern and post-industrial societies, as well as problems of race and ethnicity. Some familiarity with parliamentary systems or other political cultures would be a helpful background for interested students. Prerequisite: POSC—140 or POSC—150 or Juniors or above. (ATTR: ARTS, ISP)

**POSC—345. Chinese and East Asian Politics 3 credits**

The course examines the history, cultural, political, economic forces which inform the politics of China and its relations with Japan, Taiwan, North and South Korea and the rest of the world. The course will examine such issues such as economic development, international trade, human rights, political organization, environment, and national security which impact these countries' domestic and foreign policies.

Prerequisite: POSC—140 or Juniors or above. (ATTR: ARTS, ISP, MULT)

**POSC—346. Middle East Politics 3 credits**

This course explores political, economic, socio-cultural, and structural factors that have intensified ethnic, religious, and tribal conflict, extreme poverty, and a legacy of authoritarianism. The propagation of the global oil trade and the consequences for marginalized and poor communities, and women and minorities in the region, will also be examined. Prerequisite: POSC—140 or 150; or GLST—100 for Globalization Studies minors. (ATTR: ARTS, GLST)

**POSC—347. Politics and Society in the Americas 3 credits**

The purpose of this course is to introduce students to the politics of Latin America and the Caribbean and to gain insight into the numerous social, political, and economic dilemmas confronting our neighbors in the Americas. Through the study of selected cases some of the more significant contemporary issues in the region will be explored, including the foreign debt crisis, environmental concerns, immigration, and the process of democratization. Prerequisite: POSC—140, POSC—150, or Juniors or above. (ATTR: ARTS, ISP, MULT)

**POSC—349. Special Studies in Comparative Politics 3 credits**

The course examines political systems at the regional, state or substate level and focuses upon socio-political organization, political socialization and decision-making structures. (May be taken more than once with different content. Consult Fall and Spring schedules for specific topics.) Prerequisite: POSC—140 or POSC—150 or Juniors or above. An additional fee may be required, depending on the course offered. (ATTR: ARTS, ISP)

**POSC—351. U.S. Foreign Policy 3 credits**

There will be a case study examination of its historic development in economic, security, and cultural involvement from isolation to globalism. Prerequisites: POSC—100 or POSC—150. (ATTR: AMSB, ARTS, ISP)

**POSC—355. Global Environmental Dilemmas 3 credits**

This course studies how national, subnational and transnational actors create and actuate norms, principles, treaties and institutions for dealing with global environmental issues. Prerequisites: POSC—150 or ENVA—110 or junior standing. (Same as ENVA—315) (ATTR: ARTS, GLST, ISP)

**POSC—357. International Negotiation 3 credits**

This course provides students with the opportunity to develop and enhance their negotiation and research skills through participation in a computer facilitated simulation in which they represent a country in an international simulation with students from colleges and universities in the United States and abroad. Each year students will represent a different country and develop issue proposals to be negotiated and voted upon at the end of the three-week simulation. Prerequisites: POSC-150 or POSC-140 or GLST-100. (ATTR: ARTS, GLST)

**POSC—359. Special Studies in World Politics 3 credits**

The course examines contemporary issues, structures, and other relationships of international relations (may be taken more than once with different content). Consult Fall and Spring schedules for specific topics. Prerequisite: POSC—150 or Juniors or above. An additional fee may be required, depending on the course offered. (ATTR: ARTS, ISP)

**POSC—360. Environmental Politics 3 credits**

A study of environmental public policy: the major actors, institutions, and rules of the game that shape decision making. We will also engage in a dialogue about the underlying philosophies that drive resource utilization and environmental preservation. We will primarily look at the case of the United States, but some attention will be given to the international dimensions of the subject. Prerequisites: POSC—100 or ENVA—110 or Junior standing. (Same as ENVA—310) (ATTR: ARTS, FSPS)

POSC—362. Refugee and Migration Studies 3 credits

This course offers three semester hours credit and explores political, economic, socio-cultural, and structural factors that create, encourage, and manage the transnational movement of populations worldwide. In particular, this seminar emphasizes an analysis of both the positive and negative implications of population movements on refugee sending and receiving countries. It also examines the impact of migration on marginalized and poor communities both in the industrialized and the developing world. Prerequisite: POSC—140 or POSC—150 or GLST—100. (ATTR: ARTS, GLST)

POSC—370. Civil Liberties I 3 credits

The conceptual basis of the status of the individual and personal rights as discussed and elaborated upon in the decisions of the Supreme Court of the United States. The case law approach is used. Prerequisite: Sophomores or above. (ATTR: AMSB, ARTS) (Offered Alternate Fall)

POSC—372. Civil Liberties II 3 credits

The practical basis of the status of the individual and personal rights as discussed and elaborated upon in the decisions of the Supreme Court of the United States. The case law approach is used. POSC—370 is not a prerequisite for POSC—372. Prerequisite: Sophomores or above. (ATTR: AMSB, ARTS) (Offered Alternate Spring)

POSC—374. Introduction to Criminal Law 3 credits

The study of crimes, e.g., murder, manslaughter, conspiracy, accomplice liability, burglary, theft. The case law approach is used. Prerequisite: Sophomores or above. (ATTR: ARTS) (Offered Alternate Fall)

POSC—376. The Fourth, Fifth and Sixth Amendments 3 credits

The study of Supreme Court decisions affecting the rights of the criminally accused under the Fourth, Fifth and Sixth Amendments to the Bill of Rights. The case law approach is used. Prerequisite: Sophomores or above. (ATTR: ARTS) (Offered Alternate Spring)

POSC—378. International Law 3 credits

The materials dealt with in this course are case analyses of international practice problems and how they reflect upon our domestic legal system. Prerequisite: Sophomores or above. (ATTR: ARTS, GLST, ISP)

POSC—450. Political Science Travel Course 3 credits

As an academically oriented field experience, this course offers three semester hours credit for a semester-long course that includes an extended study program in selected geographical areas. Lectures, supervised research into aspects of the field study course, and orientation meetings will prepare students for an informed experience. Travel cost paid by student. Cost varies each semester. Permission by instructor required. (ATTR: ARTS)

POSC—470. Internship in Judicial Process 3 credits

The objective of this course is to expose students to the intricacies of the State Judicial Process by blending selected readings and participation in seminar sessions with hands-on participation in the 3rd Judicial District of State Supreme Court. Students will serve as Judicial Process Interns and perform duties and responsibilities as determined by their State Supreme Court sponsors. Students will serve 120 to 150 hours during the semester. Students will be graded based upon joint evaluation by the judicial sponsor and internship professor. Written permission of the internship supervisor is required. The internship is offered on a semester basis and may be taken in the fall or spring semester. (ATTR: ARTS, INT)

POSC—485. Internship in Legislative Process 3 credits

The objective of the course, exposure to the intricacies of the legislative process, is achieved by a blend of selected readings and participation in the New York State Legislature. Students will serve as Legislative interns working 120 to 150 hours during the semester performing duties and responsibilities as determined by the legislator in consultation with the faculty director. Students will be graded based upon joint evaluation of the legislator and internship professor. Written permission of the internship supervisor is required. (ATTR: ARTS, INT)

POSC—489. Internship in Public Service Studies 3 credits

The course is designed to prepare and expose students to public policy making in New York State and allow them to participate in public policy formulation and execution at the state, substate and not-for-profit level. Students will serve as Public Service interns working 120 to 150 hours during the semester performing duties and responsibilities as determined by the agency supervisor in consultation with the faculty director. Students will be graded based upon the joint evaluation of the agency supervisor and internship professor. Written permission of the internship supervisor is required. (ATTR: ARTS, INT)

POSC—490. Political Science Honors 3 credits

Department approval, junior or senior status, and a minimum overall GPA of 3.5 are all required. Consult Department for specific topics. Students may repeat this course for credit provided the selected subject matter has not previously been taken for credit. (ATTR: ARTS)

POSC—495. Capstone Prep Seminar 1 credit

The Capstone Prep Seminar will prepare students for the Capstone Thesis POSC 497. Students will produce a research proposal for their intended research project related to the theme of the Capstone Thesis in which they are enrolled in the subsequent semester. The seminar will meet in the last third of the semester. Enrollment may be in the spring of the junior year or the fall of the senior year. Requires completion of the 100 level sequence (POSC 100, 130, 140, 150 and the methods sequence 178 and 182) as well as the Portfolio Review. Cannot be taken concurrently with POSC 497. Permission of Instructor required.

POSC—497. Capstone Thesis 3 credits

The Senior Capstone Thesis is a student-oriented course that is a culminating experience in the major. Students will produce a substantial research paper based on their independent research in the context of the thematic focus of the capstone. The capstone will feature themes that cross subfields in political science to give students enough breadth and focus for their original projects. Students will have selected their capstone thesis topic in the Capstone Prep Seminar, POSC-495, taken in the previous semester, and must have attended one professionalization event (graduate school workshop or career workshop). Cannot be taken concurrently with POSC 495. Permission of Instructor required.

POSC—499. Independent Study in Political Science 1 - 3 credits

Special problems of research in any of the following areas: Political Theory and Methodology, American Government, Comparative Government, International Relations, Law, Foreign Policy, and Area Studies. Students must have the approval of the faculty member guiding their studies and the department head. Prerequisite: Juniors or above and permission. (ATTR: ARTS)

Please refer to ATDV—788 and 789 and the Washington Semester Program section of the catalog for additional information on the following listings:

POSC—790. Washington Semester I – American Politics: National Government I 4 credits(ATTR: ARTS)

POSC—791. Washington Semester II – American Politics: National Government II 4 credits(ATTR: ARTS)

POSC—792. Washington Semester I – American Politics: Public Law I 4 credits(ATTR: ARTS)

POSC—793. Washington Semester II – American Politics: Public Law II 4 credits(ATTR: ARTS)

POSC—794. Washington Semester I – Justice I 4 credits(ATTR: ARTS)

POSC—795. Washington Semester II – Justice II 4 credits(ATTR: ARTS)

POSC—796. Washington Semester I – Policy I 4 credits(ATTR: ARTS, ISP)

POSC—797. Washington Semester II – Policy II 4 credits(ATTR: ARTS, ISP)

## **Psychology Department**

Chair: Dr. Dean M. Amadio Assoc. Prof.

Prof.: Dr. Karen Boswell, Dr. Maureen T. Hannah,

Fr. Daniel Nelson O.F.M., Dr. Robert J. Woll

Assoc. Prof.: Dr. Betty A. Bachman, Dr. Dmitry Burshteyn,

Dr. Patricia Cameron, Dr. Max Levine, Dr. Kristin Miller, Dr. Thomas Swan

Asst. Prof.: Dr. Diana Betz, Dr. Emily Smith

The Psychology Department offers a unique perspective on human diversity, encourages self-knowledge, and helps students to develop critical thinking skills in the tradition of the liberal arts and sciences. As both a science and profession, Psychology incorporates theories and principles of behavior and mental processes based on empirical investigation which are used to describe and predict behavior, to solve practical problems, and to promote human welfare.

The Psychology program prepares students for entry into graduate programs leading to careers in academic and professional psychology. The study of psychology also provides an excellent background for careers in other fields such as law, business, and the health-care professions.

Opportunities for outstanding students include internships in various field settings as well as collaborative research with faculty members. The mainframe computer and several microcomputers are accessible in the Psychology Laboratory in Roger Bacon Hall. Computer software is available for data collection and analysis, writing, and class demonstrations. The department maintains a collection of published and unpublished psychological tests and measures which may be used in student and faculty research projects.

**Requirements for the Major, B.A. in Psychology ( 31.000 credits ):**

PSYC 100 - General Psychology		3 cr.
PSYC 260 - Social Psychology		3 cr.
PSYC 300 - Research Methods in Psych I		4 cr.
PSYC 200 - Child Psychology	<b>OR</b>	
PSYC 205 - Adolescent Psychology	<b>OR</b>	
PSYC 210 - Adult Development		3 cr.
PSYC 215 - Theories of Personality	<b>OR</b>	
PSYC 220 - Abnormal Psychology		3 cr.
PSYC 240 - Learning	<b>OR</b>	
PSYC 340 - Human Cognition		3 cr.
PSYC 350 - Physiological Psychology	<b>OR</b>	
PSYC 355 - Sensation and Perception		3 cr.
PSYC 310 - Tests and Measurements	<b>OR</b>	
PSYC 400 - Research Methods in Psych II	<b>OR</b>	
PSYC 490 - Seminar in Psychology		3 cr.
6 credits Psychology Electives		6 cr.

**Auxiliary ( 11.000 credits )**

ATDV 110 - Statistics for Social Science		3 cr.
BIOL 130 - General Biology IA for Social Sciences		4 cr.
BIOL 140 - General Biology IIA for Social Sciences		4 cr.

Courses in Computer Science and the other social sciences are recommended. Students who plan to attend graduate programs are strongly encouraged to take Research Methods in Psychology II (PSYC—400). Psychology majors are encouraged to work closely with their faculty advisor in planning academic programs consistent with their interests and career goals.

**Requirements for the Minor, Psychology ( 21.000 credits ):**

PSYC 100 - General Psychology		3 cr.
PSYC 260 - Social Psychology		3 cr.
ATDV 110 - Statistics for Social Science	<b>OR</b>	3 cr.
QBUS 200 - Business Statistics I		4 cr.
One course from PSYC 240, 245, 250, 340, 350 355		3 cr.
One course from PSYC 200, 205, 210		3 cr.

### Description of Courses

**PSYC—100. General Psychology 3 credits**

A study of the basic topics in psychology that lay the foundation for courses leading to a major in psychology and are relevant to assisting students in understanding themselves and others. This course is recommended to students seeking an elective in psychology and as the initial course for psychology majors. (ATTR: ARTS, CAS, CDS)

**PSYC—120. Psychology of Women 3 credits**

This course introduces the student to theory and research issues that explore the psychological experiences of women. Topics covered include various conceptual models of women, biological influences on their behavior, theories of female development, gender differences in personality and behavior, and problems of adjustment. It concludes with an examination of alternative lifestyles for women today. Prerequisite: PSYC—100. (ATTR: ARTS, WSTU)

**PSYC—200. Child Psychology 3 credits**

A study of human growth and development from conception to puberty, including motor, emotional, intellectual, language and social development, and children's imaginative activities, ideals, morals, religion, and interests with particular emphasis on contemporary theories. Prerequisite: PSYC—100. (ATTR: ARTS)

**PSYC—205. Adolescent Psychology 3 credits**

The experience of adolescence as a distinct period of development is examined. Topics include biological processes and their psychosocial significance including health problems. Issues related to adolescent sexuality are also examined including sexual attitudes and behavior and gender roles. Intellectual changes during adolescence and their effects on social cognition, moral reasoning, and political thought are described. Selected family issues and relationships as influences on adolescent development are considered as well as peer group relationships, friendships, and other social relationships. The issue of identity formation is examined in detail. The effects of school experiences on academic achievement and career development are also discussed as are adjustment problems and disturbances during adolescence. Prerequisite: PSYC—100. (ATTR: ARTS)

**PSYC—210. Adult Development 3 credits**

This course introduces the student to the field of adulthood using a developmental approach as a systematic framework. The focus of the course is on issues that involve both change and continuity across early, middle and later years of the adult life cycle. The interaction of psychological, sociological and biological factors as well as the interaction between individuals and their environment is emphasized. In order to provide a comprehensive look at behavioral age changes, various theories and models of development and aging are discussed. Prerequisite: PSYC—100. (ATTR: ARTS)

**PSYC—215. Theories of Personality 3 credits**

Theories of personality including psychoanalytic, neo-analytic, trait, learning, and humanistic paradigms are examined and evaluated. Prerequisite: PSYC—100. (ATTR: ARTS)

**PSYC—220. Abnormal Psychology 3 credits**

Maladaptive behaviors are studied from theoretical and research perspectives. Topics include the psychoses, anxiety disorders, personality, social and sexual disturbances, disorders of childhood, organic mental disorders, and substance abuse. Therapeutic interventions and legal issues are also considered. Prerequisite: PSYC—100. (ATTR: ARTS, JMN)

**PSYC—225. Health Psychology 3 credits**

Health psychology is a basic research and clinical practice area within psychology that focuses on understanding the scientific relationships between social, behavioral, and psychological processes and health. Topics will include health beliefs and health-enhancing behaviors, the effects of stress and coping on illness and disease recovery, adjustment to chronic or terminal illnesses, and clinical interventions such as pain management, behavioral management of diseases like HIV-spectrum illness and cancer, the relationship between the health care provider and patient, and cross-gender and cross-cultural variations in prevention and development of disease and in the factors related to positive coping with illness. Prerequisite: PSYC—100. (ATTR: ARTS, HSMR)

**PSYC—240. Learning 3 credits**

This course surveys historical and contemporary theories of human and animal learning. The psychological study of learning is traced as it has developed over the past 100 years. Among the earlier theorists surveyed are Thorndike, Pavlov, Guthrie, Hull, and Tolman. The more recent theories of Skinner and Bandura are given extended treatment. Current perspectives from cognitive science and neurophysiology are also reviewed. A general theme of this course is to demonstrate the relevance of each learning theory to matters of practical human importance. This course provides background that is of special relevance to individuals interested in education, child development, counseling, and clinical psychology. Prerequisite: PSYC—100. (ATTR: ARTS, PXEX)

PSYC—245. Human Motivation 3 credits

Motivational questions are fundamental to all of Psychology. The psychology of motivation inquires about the conditions which serve to initiate, maintain, direct, and terminate ongoing behavior. This course considers theory and research associated with the major perspectives on human motivation including instinct, ethological, and sociobiological theories, drive theories, arousal theory, expectancy-value theories, humanistic theories, cognitive consistency theories, and theories of causal attribution. The experimental and clinical significance of these viewpoints receive comparable attention. Prerequisite: PSYC—100. (ATTR: ARTS, PXEX)

PSYC—250. Comparative Psychology 3 credits

A critical analysis of the several approaches to the study of behavior, including the comparative method. Examples will be drawn from representative levels of human and animal behavior. Students will participate in a project or term paper. Prerequisite: PSYC—100. (ATTR: ARTS, PXEX)

PSYC—255. Sexual Behavior 3 credits

Exploration of the contributing elements of sexual behavior in a wide range of animal and human situations. Coverage of the psychological controls and implications of sexuality will include group and individual sexual development, norms of behavior, attraction, gender development and identification, birth control, art, and literature. Additional attention will be paid to the involvement of the retarded, the handicapped, and the aged in sexual behavior. A research paper or class presentation will be required. Prerequisite: PSYC—100. (ATTR: ARTS)

PSYC—260. Social Psychology 3 credits

This course is designed to familiarize students with a broad array of classic and current theory and research that are studied primarily by psychologists in the area of social psychology. Students will become familiar with the topics of social psychology and the methods used to study it. Topics include social cognition, social perception, attitudes and attitude change, love, hate (prejudice), conformity, compliance, obedience, and influence. In addition to becoming familiar with theory and research findings, the course emphasizes ways in which the information can be useful to students in their daily lives. Prerequisite: PSYC—100. (ATTR: ARTS, PXEX)

PSYC—265. Introduction to Group Psychology 3 credits

This course is an introduction to the study of group interaction through theoretical perspectives and current research. The study of group dynamics includes topics such as group formation and socialization, communication, how power is wielded in groups, the beneficial and detrimental effects of groups on performance and decision-making, conformity in groups, intergroup relationships, and conflict. Classes will be structured so that students have opportunities to monitor their own group processes as they study theory and research. Prerequisite: PSYC—100. (ATTR: ARTS)

PSYC—285. Topics in Psychology 3 credits

This course will explore a topic not covered in regular course offerings. Particulars will be announced during the semester previous to that in which the course will be offered. May be taken more than once with different content. An additional fee may be required, depending on the topic offered. Prerequisite: PSYC—100. (ATTR: ARTS)

PSYC—300. Research Methods in Psychology I (3 hours lecture, 2 hours laboratory) 4 credits

This course familiarizes students with basic principles of psychological research through lecture and laboratory experience. Drawing examples from various areas of psychology the course trains students to design and conduct experiments, to evaluate the internal and external validity of studies, and to analyze and interpret data in the context of relevant research literature. Students gain familiarity with technical sources in psychology. The social and ethical aspects of psychological research are also examined. The course features practice regarding the standard elements of format and style used to report the results of psychological investigations. Prerequisites: PSYC—100, ATDV—110. Lab fee. (ATTR: ARTS)

PSYC—310. Tests and Measurements 3 credits

This course is designed to familiarize the student with the rationale of test construction and with the more popular intelligence, achievement, aptitude, interest and personality tests used in clinical, industrial and academic settings. Each student is required to complete a research project utilizing test data. Prerequisites: PSYC—100, ATDV—110. (ATTR: ARTS)

PSYC—320. Counseling Theories and Techniques 3 credits

This course provides students with an in-depth introduction to three prominent counseling theories as well as basic training in some of the tools and techniques that are needed by the entry-level counselor. In light of the demographic makeup of many clinical populations, issues related to working with women and members of minority populations will be heavily emphasized. Because a major goal of the course is to impress students with the importance of grounding counseling practice in sound psychological theory, theoretical issues and practical applications will be interwoven continuously throughout the semester. Prerequisites: PSYC—100, PSYC—220. (ATTR: ARTS)

PSYC—325. Childhood and Adolescent Psychopathology 3 credits

This course will examine some of the most well-researched and interesting psychological disorders of childhood and adolescence, including clinical descriptions, DSM-IV diagnostic criteria, and theoretical bases for the explanation and treatment of these disorders. Included will be an overview of some psychosocial contributors to psychological problems of childhood, including child sexual and physical abuse. In addition, the course will cover psychotherapeutic interventions with children and adolescents. Prerequisites: PSYC—100, PSYC—220. (ATTR: ARTS)

PSYC—340. Human Cognition 3 credits

This course surveys human mental processes. Cognition involves the ability to store, retrieve, and use knowledge. In-class demonstrations and activities supplement lecture material on attentional processes, memory, imagery, concept formation, language, reasoning, problem-solving, and creativity. The course emphasizes theoretical and experimental aspects of cognitive psychology as well as everyday applications, and relates cognitive processes to other areas of psychology such as development, clinical, social, and neuropsychology. Prerequisite: PSYC—100. (ATTR: ARTS, PXEX)

PSYC—342. Human Intelligence 3 credits

This course surveys theoretical and applied issues relating to the nature of human intelligence. The history of intelligence testing is covered, with emphasis on its impact on social policy in the United States throughout the 20th century. The question "What is intelligence?" is examined from several viewpoints, including psychometric, information processing, and cross-cultural perspectives. Theory and research regarding hereditary versus environmental influences on intelligence are studied. Finally, prospects for training intelligence through the use of thinking skills programs are evaluated. Prerequisites: PSYC—100, ATDV—110 or equivalent. (ATTR: ARTS)

PSYC—345. Drugs and Human Behavior 3 credits

This course examines the actions of psychoactive drugs on brain and behavior. Drugs of abuse and psychotherapeutic drugs are given about equal emphasis. Drug use as a social problem is examined in historical and current perspectives, covering substances such as narcotics, stimulants, hallucinogens, marijuana, and alcohol. Drugs of abuse are examined with regard to their mechanisms of action, effects on the body and on behavior. Addiction and treatment approaches are examined from multiple perspectives. Medicines for psychological disorders (affective, anxiety, schizophrenia) are studied by examining the mechanisms of drug action on the brain; major and minor tranquilizers and antidepressant medications are covered. Also discussed are "non-drug" drugs caffeine and nicotine. Prerequisite: PSYC—100. (ATTR: ARTS, HSMR, JMN)

PSYC—350. Physiological Psychology 3 credits

A course consisting of the physiological and neurological bases for behavior, including the study of the nervous system, endocrine system, sensation and perception, the motor system, and the physiological basis for motivation. Prerequisite: PSYC—100. (ATTR: ARTS, CFN, PXEX)

PSYC—355. Sensation and Perception 3 credits

This course examines how humans take in information through the senses, and the relationship between sensory input and conscious experience. The visual system is examined in detail as a prototype, and examples from other senses (hearing, taste, touch, pain) are included throughout the course. Among topics included are psychophysics, physiological bases of sensation, attention, perception of form, depth, contrast, motion, object constancies, and perceptual development. Lecture material is supplemented by demonstrations designed to

allow students to experience many of the perceptual phenomena studied in the course. Prerequisite: PSYC—100. (ATTR: ARTS, CFN, PXEX)

**PSYC—365. Industrial and Organizational Psychology 3 credits**

This course introduces students to the range of activities and issues of major concern to contemporary industrial and organizational psychologists. The evolution of the field is viewed in historical perspective. Major topics in personnel psychology include personnel selection and placement, utility models and profitability, employee training and development, and performance appraisal concepts and techniques. The current legal guidelines regarding Equal Employment Opportunity and Affirmative Action are considered as they impact on personnel practice. Topics in organizational psychology include work motivation, job satisfaction and the quality of life, and perspectives on leadership and supervisory role. Prerequisite: PSYC—100. Not open to students who have taken PSYC—110. (ATTR: ARTS)

**PSYC—370. Intimate Relationships 3 credits**

This course will focus on current, prominent, and clinically applicable theories of intimate relationships. Students will be exposed to the writings of theorists, clinicians, and researchers who have examined relational dynamics and the factors that contribute to relationship satisfaction or dissatisfaction. Included will be an examination of hypothesized and empirically established gender differences in intimate relationship functioning. Clinical applications of theories and case studies will be emphasized. Prerequisite: PSYC—100. (ATTR: ARTS, MINR)

**PSYC—375. Forensic Psychology 3 credits**

Forensic psychology is a cutting-edge interdisciplinary arena that spans the fields of psychology, sociology, law, criminal justice, and public policy, among others. Forensic psychology unites various areas of clinical psychology, with its emphasis on psychopathology (e.g., the insanity defense) and psychological assessment (e.g., the use of assessment devices in determinations of competence and in child custody evaluations) and social psychology, with its body of literature on psychological phenomena salient to legal processes (e.g., interpersonal persuasion, the reliability of memory in eyewitnesses, psychological factors relevant to jury selection, the detection of lying) with the theory and practice of law. As a profession, the subspecialty of forensic psychology prepares psychologists to interact with the legal arena in a variety of roles, including expert witness, child custody evaluator, determiner of mental competence and dangerousness of criminal defendants, police psychologist, prison psychologist, and consultant to military, federal, state, and local law enforcement agencies. Prerequisite: PSYC—100. (ATTR: ARTS)

**PSYC—380. History and Systems of Psychology 3 credits**

A study of the intellectual roots of modern psychology, including contributions from philosophy and physiology. Major figures in the history of psychology are discussed as well as their schools of thought: Structuralism, Functionalism, Gestalt Psychology, Behaviorism, and Psychoanalysis. Additional topics included are the history of clinical psychology (views and treatment of mental illness), and the rise of mental testing. Prerequisites: 12 credits in psychology. (ATTR: ARTS)

**PSYC—400. Research Methods in Psychology II (3 hours lecture, 3 hours lab) 3 credits**

This course is designed to extend students' knowledge of research methods beyond PSYC—300 and to give students opportunities to apply their knowledge by conducting original research. Advanced topics in research design and statistical analysis, including the use of computer software, are featured. An oral presentation and formal written report of the investigation are required. Prerequisites: ATDV—110, PSYC—300. Lab fee. (ATTR: ARTS)

**PSYC—480. Internship in Psychology 3 credits**

Field experience in a setting specializing in research and/or clinical activities in professional psychology may be arranged for Junior and Senior Psychology majors. Interns spend eight hours/week in the field for 14 weeks where they are supervised by agency personnel. Interns are also required to meet weekly with a campus supervisor and to develop a paper appropriate to the placement. Course prerequisites include a minimum of 15 credits in Psychology including PSYC—310 (Tests and Measurements) and other courses considered relevant to specific placements. The department also screens applicants based on academic record and judged personal readiness to function effectively in a professional setting. Additional information may be obtained from the department. Interested students must submit a formal application to the department during the first three weeks of the semester preceding the proposed placement. (ATTR: ARTS, INT)

**PSYC—490. Seminar 3 credits**

Intensive scrutiny of a specific topic in psychology will be undertaken in a small group with emphasis on primary sources. This course may be taken more than once with different content. Prerequisite: 15 credits in psychology or permission of instructor. (ATTR: ARTS)

PSYC—499. Independent Study 3 credits

A course consisting of individually planned research projects in the area of student's interest under the supervision of a member of the Psychology Department. (ATTR: ARTS)

## Religious Studies Department

Chair: Dr. W.T. Dickens Prof.

Prof.: Mr. Joseph G. Allegretti, Esq., Dr. Lois K. Daly, Dr. Michael B. Dick, Fr. Kevin Mullen, O.F.M.,  
Dr. Fareed Munir, Fr. Dennis E. Tamburello, O.F.M. , Dr. Peter S. Zaas

Assoc. Prof: Fr. Linh Hoang, O.F.M.

Asst. Prof.: Dr. Holly J. Grieco, Dr. Perundevi Srinivasan

Visiting Asst. Prof.: Dr. Debra J. Erickson

The principal aim of the Religious Studies Department is to help students at Siena understand and appreciate the meanings and roles of religion in human culture. The academic investigation of religion is a component of a liberal arts education and clearly has an important function at a college sustained by the Franciscan tradition. The Department presents in its courses a critical study and appreciation of the various religious traditions of the world. Through this approach to Religious Studies, the Department provides students with an opportunity to explore the significance of human existence in its relation to the sacred, and alerts them to the importance of religious beliefs and practices in the political, social, aesthetic and economic arenas. Our courses are designed for all students, regardless of their personal religious stance, and approach religious experience from cross-cultural, multidisciplinary and global perspectives.

### Requirements for the Major, B.A. in Religious Studies ( 36.000 credits):

3 credits of either RELG 101, 121, 141, or 181	3 cr.
RELG 490 - Seminar in Religious Studies	3 cr.

3 credits from each of the following areas:

Historical Studies (RSHS)	3 cr.
Scriptural Studies (RSSC)	3 cr.
Religious Thought (RSRT)	3 cr.
Ethics (RSET)	3 cr.
World Religions (RSWR)	3 cr.

Religion Electives	15 cr.
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\*INSA 400 and INSA 480 may be counted as elective RELG credits by Religious Studies majors.

Students are encouraged to take advantage of religious studies course offerings in the Hudson-Mohawk Association of Colleges.

### Auxiliary ( 6.000 credits )

Two semesters in the same foreign language

These languages include: French, Spanish, German, Latin, Russian, Greek, Italian or Arabic. 6 cr.

\*American Sign Language does not fulfill this requirement.

### Requirements for the Minor, Religious Studies (18.000 credits):

RELG 490 - Seminar in Religious Studies	3 cr.
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Two courses from the following, not from the same area:	6 cr.
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Scriptural Studies (RSSC)	
Historical Studies (RSHS)	
Religious Thought (RSRT)	
Ethics (RSET)	
World Religions (RSWR)	

Religious Studies Electives	9 cr.
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(May include two core disciplinary courses: RELG 101, 121, 141, 181)

INSA 400 and INSA 480 may be counted as RELG elective credits for Religious Studies Minor.

### **Description of Courses**

All students are required to take one course in the Department of Religious Studies (RELG—101 through RELG—181). It is recommended that the course be taken during the freshman or sophomore year. Transfer credits in religious studies may count towards the core requirement.

Each of the following courses (RELG—101 - RELG—181) will examine the nature and expressions of religious experience from the perspective of a specific field within the discipline of Religious Studies. Any of these courses will satisfy the Religious Studies disciplinary course requirement in the core curriculum. A disciplinary course in Religious Studies must be completed successfully before any other course in the Religious Studies Department can be taken.

**RELG—101. Religion in Western Culture 3 credits**

An introduction to religion through an historical examination of western religious communities, the course focuses on Judaism, Christianity, and Islam as they have developed in a variety of forms while retaining certain central traditions. (ATTR: ARTS, CDR)

**RELG—121. Introduction to Biblical Studies 3 credits**

An introduction to the Bible, using the tools of contemporary biblical scholarship, including literary and historical criticism, archaeology, and philology. The course will examine the history of the biblical text and the biblical canon, the relationship between the Bible and its companion literatures, and the ways in which biblical texts are interpreted by different Christian and Jewish religious communities. (ATTR: ARTS, CDR)

**RELG—141. An Introduction to Religious Thought 3 credits**

An examination of religious thought—theology and ethics—in the Western traditions of Judaism, Christianity, and Islam. Using primary texts, particular attention will be given to an exploration of the ways religious individuals and communities understand the divine, human experience, and the world. (ATTR: ARTS, CDR)

**RELG—181. Experiences of the Sacred 3 credits**

An introduction to the discipline of Religious Studies through an examination of the nature of religious experience, its relation to human understandings of the Sacred, and its expressions in human history and culture. These themes will be concretely illustrated through examples drawn from such religious traditions as Buddhism, Christianity, Hinduism, Islam, Judaism and Confucianism. Contemporary forms of religious experience will be emphasized. (ATTR: ARTS, CDR)

**RELG—205. Judaism 3 credits**

This course is a survey of the Jewish historic experience, examining the forces that have shaped the ongoing development of Judaism, its beliefs and practices. Major issues and trends in modern Jewish life will be explored, including the Holocaust and Zionism. This course is sponsored in part by the Jewish Chautauqua Society. (ATTR: ARTS, CAR, RSHS)

**RELG—207. Christianity 3 credits**

This course examines the origins and historical development of Christianity, including its contemporary, global diversity. It will not adopt the perspective of any one Christian tradition, but will include a variety of perspectives, from within Roman Catholic, Eastern Orthodox, Protestant, and dissenting traditions. The course explores major issues and movements within Christianity that have been important in the development of western intellectual, cultural, and religious traditions. These may include sin and redemption, the imitation of Christ, worship and devotion, colonialism and the spread of Christianity, and the Church and secular society in America. Prerequisites: RELG-101, 121, 141, 181 or permission of instructor. (ATTR: ARTS, CFH)

**RELG—210. Islam 3 credits**

The historical origins of Islam, the emergence and development of various strands of religious tradition, and their impact on the modern world. Analysis and historical survey of such key concepts as tawhid (essence of Islam), and of its basic categories for religious life, theology, law, literature, philosophy, and science. In addition attention is paid to the growing presence of Islam in Europe and America. (ATTR: ARTS, CAR, GLST, MULT, RSHS, CFD)

**RELG—215. Eastern Christianity 3 credits**

A survey of the historical and religious development of those churches which belong in the tradition of Eastern Christianity and the contributions which churches of the Eastern tradition make to Christianity in the contemporary world. (ATTR: ARTS, CAR, RSHS)

RELG—220. Language for Scripture Study 3 credits

A study of a language that is essential for scholarly study of the Bible or the Qur'an. This course may be taken for up to four semesters of Arabic, Greek, Hebrew, or other languages (e.g., Latin, Aramaic) related to scripture study. (ATTR: ARTS, RSSC)

RELG—240. Introduction to Christian Theology 3 credits

A study of the foundations of Christian belief. Basic themes in Christian thought such as the meaning of human existence, the experience of God, the significance of evil, and the community as focus of God's activity will be explored in terms of the person and work of Jesus. (ATTR: ARTS, CAR, RSRT)

RELG—250. Women and Religion 3 credits

This course will focus on the varieties of women's religious experience. Various descriptions of the reality, distinctiveness, and value of women's religious experience as well as the role of women in institutional forms of religion will be analyzed. Readings will be drawn from the major religions of the world, with focus on the western religious traditions. (CORE: AR) (ATTR: ARTS, CAR, RSRT, WSTU, CFD)

RELG—260. Religion and Moral Decision 3 credits

An examination of moral experience, moral character, and moral discernment, as well as an analysis of the principles and procedures used in the Western religious traditions to adjudicate crucial moral issues such as: sexual morality, medical ethics, race relations, and moral judgments about warfare. (ATTR: ARTS, CAR, ISP, RSET, CFJ)

RELG—265. Introduction to Catholic Social Teaching 3 credits

This course introduces students to the sources, concepts, beliefs, and practices central to Catholic social teaching. In light of biblical and theological traditions that the Catholic Church asserts are fundamental to being Christian, the course examines various social problems that pose challenges to those committed to justice. The course equips students to analyze ecological, economic, social, and political policies using the critical resources of Catholic social teaching in dialogue with other modes of social analysis. After exploring global issues during the first half of the semester, we will consider domestic problems in the United States. The course aims to educate students about current affairs from the perspective of Catholic traditions on social justice as well as to refine their analytical skills in applied moral theology. Prerequisite: one disciplinary course in religious studies. Offered at least once every two years. (ATTR: ARTS, CAR, RSET)

RELG—270. Religion and the Environment 3 credits

An examination of the stances and attitudes toward nature and the environment taken by several religious communities. The course will assist students to develop a constructive assessment of the theological and ethical contributions religious communities can make to environmental studies. (Same as ENVA—230.) (ATTR: ARTS, CAR, CFN, RSET)

RELG—280. World Religions 3 credits

A survey of the religious experiences and traditions of selected Non-Western peoples. The traditions which will be examined include the religions of native peoples, Buddhism, Hinduism, and traditions of China and Japan. Emphasis will be placed on the living and dynamic nature of these traditions in the past and their expressions in the contemporary world. (ATTR: ARTS, CAR, GLST, RSWR, CFD)

RELG—300. Topics in Religious Studies

A study of a specialized topic in one of the fields of Religious Studies, which include historical studies, scriptural studies, religious thought (theology and ethics), and world religions. The selected subject matter is announced in the schedule of course offerings in semesters when it is offered. Students may repeat this course for credit provided the selected subject matter has not been previously taken for credit. An additional fee may be charged depending on the topic offered. (ATTR: ARTS, FSRS, REB)

RELG—301. The Reformation of Christendom 3 credits

The reform of western Christianity in the sixteenth and seventeenth centuries as Europe moved from the medieval to the modern world. Special attention will be paid to significant figures such as Luther, Calvin, and Ignatius Loyola. Prerequisites: (HIST—101 or 190) and (RELG—101 or 121 or 141 or 181)(ATTR: ARTS, CAR, RSHS, CFH) (Same as HIST—384)

RELG—305. Religion in America 3 credits

An examination of certain religious traditions as ways of understanding the development and practice of religion in America. The central focus is on the interaction between religion and American culture. Using a historical approach, the course examines mainstream religious traditions such as Judaism, Christianity, and Islam, as well as non-mainstream religious traditions, such as African American Religion and American Buddhism. (ATTR: AMSC, ARTS, CAR, RSHS)

RELG—310. The American Evangelical Tradition 3 credits

The development and transformations of Evangelical Pietism and its impact on American life. Emphasis will be placed on revivalism as the central theme of this tradition in America. (ATTR: AMSC, ARTS, CAR, RSHS)

RELG—315. American Catholicism 3 credits

This course examines the historical backgrounds and present situation of the American Catholic community placing major emphasis on how this community has been formed by the unique American historical experience while, at the same time, contributing to this experience. Attention will be paid to issues confronting this community in the twentieth century, e.g., the role of women, minorities and the native American, questions of war and peace. (ATTR: AMSC, ARTS, CAR, RSHS)

RELG—320. Biblical Archaeology 3 credits

An examination of the ancient cultures of Palestine from Neolithic times to the early days of the Christian church. RELG—320 studies both the material culture of Palestine as uncovered in excavations and also the nature (and limits) of new archaeological methods. Biblical Archaeology also probes the relationship between text (the Bible and ancient inscriptions) and these material remains. The course will investigate the religion of Israel as can be deduced from excavations but will place that religion in the broader context of the entire culture of Israel and of the ancient Near East. (ATTR: ARTS, CAH, RSSC)

RELG—324. Introduction to the Old Testament 3 credits

A comprehensive study of the literatures of the Old Testament/Hebrew Bible and the religious, historical, sociological, and economic factors which affected both their writing and their eventual acceptance as canonical literature by Judaism and Christianity. The course will expose the students to samples of all the main literary genres of the Old Testament and will study them using most of the contemporary biblical methodologies. The course will emphasize that the Hebrew Bible emerged on the broader stage of the ancient Near East between the high cultures of Mesopotamia and Egypt. It will also approach many crucial topics in the Old Testament such as the evolution of biblical monotheism, Israelite religion(s), the emergence of Israel in Canaan, Creation and Covenant. Prerequisite: RELG—121 or permission of instructor. (ATTR: ARTS, CAR, RSSC)

RELG—325. Islamic Scripture: Qur'an 3 credits

The Qur'an is sacred scripture and Muslims believe it was revealed to Prophet Mohammad Ibn Abdullah in Arabic over a period of 23 years in Arabia where the first Islamic community developed. This course examines the range of religious experiences represented by the Qur'an text, its geographical surroundings from which it emerged, its interpreters, and its critics. With the use and examination of various translations of the Qur'an, the course examines the religion and culture of the pre-Islamic period, the history of the text including Hadith literature, and the relationship between the Qur'an and Jewish and Christian scriptures, acting to familiarize students with its broad scope. (ATTR: ARTS, CAR, RSSC)

RELG—328. Religion in the Arabic Media 3 credits

Modern Standard Arabic will be studied and utilized as a research tool intended to develop proficiency in reading for comprehension and translation into English through the study of grammar, development of composition exercises, and basic conversation practice. Student focus will be on the study of the religious dimension of Arabic sources to strengthen their use of micro skills and strategies employed in written and basic oral communication, such as describing religious events, expressing ideas, and stating and defending opinion. Permission of instructor required. Offered every two years. (ATTR: ARTS, RSWR, FSRG)

RELG—330. Jesus, the Gospels, and Christian Origins 3 credits

A study of the life and teachings of Jesus and of the community founded in his name, with special attention to the available historical sources; a literary, historical, and theological examination of the four gospels. (ATTR: ARTS, CAR, RSSC, CFH)

RELG—335. Paul and the Rise of the Christian Church 3 credits

An examination of the person and teachings of Paul as these are reflected in his letters, with consideration of how Paul's contributions were developed by subsequent generations of Christians in such works as the Pastoral Epistles, the Book of Acts, and other early Christian literature. (ATTR: ARTS, CAR, RSSC)

RELG—340. The Modern Search for Jesus 3 credits

A study of the person and work of Jesus in the light of twentieth century thought. Attention will be given to the debate concerning the historical Jesus and the Christ of faith, the Christological formulations of the Christian scriptures and the early Christian community, and the place of Jesus in the thought of such theologians as Rahner, Bultmann, Barth, and Tillich. (ATTR: ARTS, CAR, RSRT)

RELG—350. Sacramental Theology 3 credits

An investigation of the biblical, historical, psychological, and sociological roots of liturgy emphasizing the place of ritual in human and Christian personal development. (ATTR: ARTS, CAR, RSRT, CFH)

RELG—355. The Catholic Tradition 3 credits

An historical and systematic examination of key elements of the Catholic tradition, e.g., tradition, sacrament, ministry, papacy, and spirituality. Contemporary issues such as the relationship between Catholicism and politics and the dialogue between Catholicism and world religions will also be explored. (ATTR: ARTS, CAR, RSRT)

RELG—357. Global Catholicisms 3 credits

This course examines how the Roman Catholic Church has influenced and been influenced by the process of globalization. Students investigate both the impact the Catholic Church has had on the non-North Atlantic societies in which it has taken root and the diversity of Catholic thought and practice occasioned by its worldwide growth. Prerequisite: one disciplinary course in religious studies. Offered at least once every two years. (ATTR: CAR, RSRT, GLST)

RELG—360. Morals and Medicine 3 credits

An examination of problems in medical ethics that are particularly urgent at the present time, such as: models for health care, human experimentation, organ transplantation, care for the dying, euthanasia, genetic engineering, artificial insemination, sterilization, behavior control, allocation of scarce medical resources, and health care delivery. Readings include a diversity of theologians, philosophers, social scientists, lawyers, historians, scientists, and physicians. Prerequisite: One disciplinary course in religious studies, BIOL—110 and BIOL—120 or BIOL—130 and BIOL 140 or BIOL—170 and BIOL 180 or permission of instructor. (ATTR: ARTS, CAR, HSMR, ISP, RSET, CFJ)

RELG—365. Religion, Values, and Business 3 credits

A critical examination of the ways in which values are expressed in business decisions within the religious and cultural contexts which shape these values. Theories of ethics and social responsibility are examined in relation to issues such as environmental concerns, hiring practices, advertising, consumer demands, and related issues that require self-regulation or government-imposed regulation of corporations. (ATTR: ARTS, CAR, ISP, RSET)

RELG—370. Religion, Morality, and Politics 3 credits

An examination of the relation between ethics and politics as interpreted by selected, representative religious thinkers. (ATTR: ARTS, CAR, ISP, RSET)

RELG—375. Modern Men, Meaning, and Morality 3 credits

A study of men's experience as gendered persons, rather than as universal human beings, from the perspectives of men's studies and religious ethics. The course will examine gender relations and critical theory as well as specific topics related to men's lives, such as: growing up male, seasons of men's lives, friends and lovers, sexuality and marriage, careers and fatherhood, politics and war, and new spiritual and social visions. (ATTR: ARTS, CAR, RSET, WSTU)

RELG—380. The Religions of Native Peoples 3 credits

An overview of the religious traditions of various native peoples such as Native Americans, Africans and Pacific Islanders. The role of religious experience in the cultural, historical and social worlds of these peoples is considered in their historical and modern settings. The course will pay special attention to the contributions of these peoples to the religious and cultural worlds of modern times. (ATTR: ARTS, CAR, MCCP, RSWR)

RELG—385. Buddhist Traditions 3 credits

A survey of the history, development and structure of the religious traditions of Buddhism including the Theravada, Mahayana, Tibetan and Zen traditions. The religious experience of Buddhists and its impact on the cultures of India, Central Asia, China and Japan are examined. In addition attention is paid to the growing presence of Buddhism in Europe and the United States. (ATTR: ARTS, CAR, GLST, MULT, RSWR)

RELG – 387. Goddesses in India and Beyond 3 credits

A study of popular goddesses from the “east” and the “west” in their specific cultural and historical settings, with considerable attention to Indian goddesses. Explores iconographies, texts, and worship practices of several goddesses belonging to diverse religious traditions including Hinduism, Buddhism, Jainism, and ancient Greek religions. Introduces interpretive strategies in goddess scholarship from comparative and feminist frameworks. Prerequisite: one RELG course at the 100 level. (ATTR: ARTS, WSTU, CAR, CFD, RSRT, RSWR)

RELG—390. Religion and Globalization 3 credits

A study of the relationship of religion and globalization in both their historical and contemporary manifestations. The course will focus on the development of New Religious Movements as global phenomena, the rise of “Fundamentalist” movements as a response to global and modern developments, and the Franciscan Tradition as a Christian encounter with globalization. Prerequisite: one RELG course at the 100 level. (ATTR: CAR, CFD, GLST, RSWR)

RELG—400. Religious Studies Field Experience 3 credits

As an academically oriented field experience, this course offers three semester hours credit for an intensive two- to two-and-a-half week study program in selected geographical areas to study aspects of religion from the perspectives of the subdisciplines of historical studies, religious thought, ethics, or world religions, preceded by orientation lectures, and including supervised research into one aspect of the field study. Examples of topics that will be explored at different times include: Religion and the Peace Process in Northern Ireland, The World of the Protestant Reformation, The Relationship between African Religion and the African American Community, and Franciscan Italy. Travel costs are paid by the student. The cost varies each semester. Students may repeat this course for credit provided the selected subject matter has not been taken previously for credit. (ATTR: ARTS, CFH, CAR)

RELG—401. The Franciscan Tradition 3 credits

An examination of Siena’s founding tradition, based on the lives and writings of St. Francis and St. Clare, an analysis of how the Franciscan tradition has developed through the centuries, and of how it is expressed in the twentieth century, especially at Siena. (ATTR: ARTS, CAR, FSR, RSHS, CFH)

RELG—405. Judaism and Modernity 3 credits

An examination of how Jews and Judaism have responded to the crisis of modernity. Topics to be examined include the effects of the breakdown of the European Ghetto; the birth of Reform, Conservative, Reconstructionist, and Neo-orthodox Judaism; the Haskalah movement; Zionism; 20th century Jewish thought; post-Holocaust theology; contemporary trends in Judaism. (ATTR: ARTS, RSHS)

RELG—420. Biblical Study Tour 3 credits

An academically oriented study of biblical lands, this specially designed course offers three semester hours credit for an intense two-week study program in the lands of the Bible, preceded by orientation lectures, and followed by supervised research into one aspect of the field tour. Travel costs paid by student. Cost varies each semester. (ATTR: ARTS, CAR, RSSC)

RELG—440. The Protestant Tradition 3 credits

A study of the beginnings of Protestant Christianity, its development in the eighteenth and nineteenth centuries, and the basic thought of representative twentieth century theologians such as Karl Barth, Dietrich Bonhoeffer, Rudolf Bultmann, Reinhold Niebuhr, and Paul Tillich. (ATTR: ARTS)

RELG—445. Liberation Theology 3 credits

This course explores the religious and theological dimensions of liberation theology. Attention will be focused on the claims about God’s activity, human nature, and the Christian life made by the advocates of liberation. Recent texts by Black, feminist, gay, and Latin American theologians will form the context for class discussions. (ATTR: ARTS, FSR, MSCP, RSRT)

RELG—480. Internship in Religious Studies 1-3 credits

This course provides field experience in religiously oriented work and programs such as those carried out in a pastoral care department, a religious service agency, a campus ministry, or a consultation center. The internship

will provide for a minimum of 120 hours during the semester on the basis of a mutually satisfactory Learning Agreement agreed to by both the Department Faculty Internship Advisor and the student in consultation with the Field Supervisor. The student will be graded by Siena's Internship Faculty Advisor in the Religious Studies Department with substantial input from the Internship Supervisor in the field. Internships are restricted to junior and senior students. Prerequisite: 12 credits in Religious Studies and permission of the Department Head. (ATTR: ARTS, INT)

RELG—490. Seminar: Topics in Religious Studies 3 credits  
Consideration of some topic in Religious Studies selected on the basis of faculty and student interest. Designed for majors and those with advance preparation in Religious Studies. May be taken more than once with different content. Consult Fall and Spring schedules for specific topics. (ATTR: ARTS)

RELG—499. Independent Study 1 - 3 credits  
A qualified student may pursue a particular topic in Religious Studies by means of independent research, an extensive paper, and periodic discussions with a member of the department. The student must have the approval of the instructor and the Department. (ATTR: ARTS)

## **Social Work Department**

Chair: Dr. Carla J. Sofka, Prof.

Prof.: Ms. Donna McIntosh, Ms. Diane Strock-Lynskey

Asst. Prof.: Dr. Cynthia Bott, Mr. Dirk de Jong

Administrative Coordinator: Mr. Joseph Zoske

Accredited by the Council on Social Work Education at the baccalaureate level, the Social Work Department prepares its students:

- to become effective generalist social workers who are diversity-affirming and culturally competent;
- to engage in advocacy and social action to achieve social and economic justice; and
- to acquire a strong sense of professional identity and commitment to professional development through future graduate study, employment or service in social work or other fields.

Admission to the Social Work Program: Applicants are considered for admission to the Social Work Program based on the following criteria:

- Admission to the College.
- Submission of social work application and two letters of recommendation.
- Completion of an interview with social work faculty.
- Academic Expectations — cumulative minimum GPA of 2.5.
- Writing Proficiency — demonstrated through the required admission essay and writing sample.
- Behavioral and Ethical Expectations – defined by the Council on Social Work Education Educational Policy and Accreditation Standards and outlined in the Social Work Program Handbook; demonstrated in prior social work coursework at Siena.

Admission Process for Current Siena Students: Formal admission to the Social Work Program is required to enter upper division courses. A student must submit an application before the end of the second semester of the sophomore year.

Admissions Process for Transfer Students: Transfer students applying for their Junior year are encouraged to formally apply to the Social Work Program at the same time they apply for admission to the College. Note: Application and admission to the College and to the Program are separate processes. Contact the Social Work Department to coordinate the application process into the Social Work Program.

Criteria for Retention in the Social Work Program: In order to remain in the Social Work Program, students must meet the following academic, behavioral, and ethical expectations:

- Academic Expectations: minimum overall GPA of 2.5 and a minimum 2.7 GPA in required Social Work major courses.
- Writing Proficiency – demonstrated through written assignments in SWRK courses.
- Behavioral Expectations – outlined in the Social Work Program Handbook and the Educational Policy and Accreditation Standards of the Council on Social Work Education.
- Ethical Expectations - outlined in the Social Work Program Handbook and the Code of Ethics of the National Association of Social Workers.

Note: Admission into the Social Work Program does not guarantee completion of the program.

Eligibility for Advanced Standing and Affiliation Agreements: Students who successfully complete all of the requirements for the Social Work Program and their Baccalaureate Degree may be eligible to apply for advanced standing in those Master of Social Work Programs that offer this status.

Note: Each MSW program has its own GPA requirements, usually 3.0 or better. If granted advanced standing, a student could be awarded significant graduate credits toward the M.S.W. degree. The Siena Social Work Program also maintains affiliation agreements with some M.S.W. degree programs. These may provide qualifying students with early admission, advanced standing and scholarship assistance. For more information, please see the "Siena College Affiliation Agreements" section of this catalog.

Requirements for the Social Work Major: In addition to meeting requirements of the College Core, students must complete 37 Social Work credits as follows: 1st year—SWRK—100 Introduction to Social Welfare and Social Work; 2nd year— SWRK—200 Social Work Practice Skills; 3rd year—SWRK—300 Human Behavior and the Social Environment I, SWRK—301 Internship in Social Work (or, by prior Department approval either PCST—480 Internship in Peace Studies or INSA—480 Internship in Franciscan Service and Advocacy), SWRK— 310 Human Behavior and the Social Environment II, SWRK 315-- Social Work Practice with Organizations and Communities, and SWRK—320 Social Work Practice with Individuals and Families; 4th year—SWRK—415 Social Work Practice with Groups, SWRK—410 and SWRK—420 Field Education I and II, SWRK— 430 Social Work Research, SWRK—440 Social Welfare Policy and SWRK—491 Child Abuse, Neglect and Maltreatment/Mandated Reporting Workshop.

Students must achieve and maintain a minimum social work major GPA of 2.7 for required SWRK courses following admission into the Social Work Program (i.e. Junior and Senior level courses).

Any student who falls below a 2.7 major GPA for the required SWRK courses at any point following formal admission into the program will be terminated from the program and required to declare another major. (The gap between the current major GPA and the required 2.7 GPA as well as any extenuating circumstances will be evaluated on a case by case basis according to the program's review process described in the Social Work Program Handbook.)

**Requirements for the Major, B.A. in Social Work (37.000 credits):**

SWRK 100 - Intro Social Welfare and Social Work		3 cr.
SWRK 200 - Social Work Practice Skills		3 cr.
SWRK 300 - Human Behavior and the Social Environment I		3 cr.
SWRK 310 - Human Behavior and the Social Environment II		3 cr.
SWRK 315 - Social Work Practice with Organizations and Communities		3 cr.
SWRK 320 - Social Work Practice with Individuals and Families		3 cr.
SWRK 410 - Field Education I		4 cr.
SWRK 415 - Social Work Practice with Groups		3 cr.
SWRK 420 - Field Education II		5 cr.
SWRK 430 - Social Work Research		3 cr.
SWRK 440 - Social Welfare Policy and Service		3 cr.
SWRK 491 - Child Abuse Neglect Workshop		0 cr.
SWRK 301 - Internship in Social Work	<b>OR</b>	1 cr.
PCST 480 - Internship in Peace Studies*	<b>OR</b>	3 cr.
INSA 480 - Internship in Franciscan Service & Advocacy*		3 cr.

\*Requires prior Department approval

**Auxiliary (21.000 credits)**

ATDV 110 - Statistics for Social Science		3 cr.
BIOL 025 - Human Biology		3 cr.
PSYC 100 - General Psychology		3 cr.
PSYC 220 - Abnormal Psychology		3 cr.
SOCI 101 - The Sociological Perspective		3 cr.
ECON 101 - Principles of Economics, Micro	<b>OR</b>	
ECON 102 - Principles of Economics, Macro		3 cr.

POSC 100 - Contemporary U.S. Politics  
POSC 205 - State and Local Government

**OR**

3 cr.

**Internship and Field Education Requirements:** Students complete the 50- hour SWRK—301 Internship in Social Work in the fall semester of the junior year or by special arrangement with the department. Settings must be approved in advance by the Social Work Program. With prior permission of the Department, students may substitute PCST—480 or INSA—480 for SWRK—301. SWRK—301 is a pass/fail course. Students complete 400 hours of field education through SWRK— 410, Field Education I and SWRK—420, Field Education II, taken during the fall and spring semesters of the senior year. Field education sites must be approved in advance by the Coordinator of Field Education. The Department does not assign a student to a site in which he/she is an employee. No credit is given for life/work experience. SWRK—410 and 420 are pass/fail courses.

**Approval for Entry into Field Education:** Because students work directly with consumers in field settings, the Department reviews the status of all students to ensure their readiness for advancement into field education. Criteria for advancement into field education are outlined in The Social Work Program Handbook and The Field Education Manual.

**Academic Credit for Life or Work Experience:** Academic credit for life experience and previous work experience is not given by the Social Work Program.

**International Study Policy:** Due to the sequential nature of the program's curriculum and the need for students to complete the internship and field work requirements, students who wish to complete a semester of study abroad must do so prior to beginning the fall semester of their Junior year.

**Withdrawal and Readmissions Policy:** Social work students who withdraw from the college prior to completing requirements must reapply to the Social Work Program if they wish to complete the program at Siena at a later date.

### **Description of Courses**

Courses noted with an (+) are specialized professional courses, restricted to students who have been admitted into the Social Work Program.

#### **Required Courses**

**SWRK—100. Introduction to Social Welfare and Social Work 3 credits**

This course provides beginning knowledge and a methodology for analysis of social welfare and social work issues and problems. Social policies, programs and services designed to address these issues and problems are also presented. The course introduces the profession of social work and its theoretical approaches including Holistic, Ecological, Systems and Strengths/Capacities perspectives on the human condition. (ATTR: ARTS, CAS, FSSW, CDS)

**SWRK—200. Social Work Practice Skills 3 credits**

This course introduces students to the concepts and skills necessary for developing and enhancing effective interpersonal communication. Particular emphasis is placed on the interview and the techniques used to engage an individual in the helping process. Students actively participate in the learning process through class exercises, role-plays and videotaped presentations. (ATTR: ARTS)

**+ SWRK—300. Human Behavior and the Social Environment I 3 credits**

This course provides traditional and alternative theories and paradigms pertaining to the individual as a human system and content on other human systems with which individuals interact (families, groups, organizations and communities). The course uses an assessment framework and an integrated body of knowledge and theory to provide students with an understanding of the bio-psycho-social-cultural-spiritual dimensions of human behavior. Emphasis is placed on how diversity enriches interactions among people and how social and economic conditions may affect the well-being of people. The course also covers how social and economic injustice can create at-risk potential for discrimination and oppression. Emphasis is placed on how to apply course content to consumer situations. Prerequisites: SWRK—100 and 200; PSYC—100. Co-requisite: SWRK—301. (ATTR: ARTS)

**+ SWRK—301. Internship in Social Work 1 credit**

This internship provides majors with the opportunity to learn about the social work profession through working in a social service setting. Students provide services to individuals and explore the relationship between the organization, the community and service consumers. Emphasis is placed on understanding the role of diversity as well as the promotion of social and economic justice within the context of a community service setting.

Internship sites must be approved by the Social Work Program. This requirement may also be met by PCST—480, Internship in Peace Studies, or INSA—480, Internship in Franciscan Service and Advocacy. (ATTR: ARTS)

+ SWRK—310. Human Behavior and the Social Environment II 3 credits

This course provides content on traditional and alternative theories of human growth and development and applies these to human behavior within the context of the social environment. Building on the assessment framework presented in HBSE I, students learn to assess how gender, age, race, color, ethnicity, culture, social class, sexual orientation, socioeconomic status and disability play a role in shaping individual life experience with human systems of various size. The individual's ability to achieve optimal health and well-being throughout the life course is also examined. Emphasis is placed on how to apply course content to client/consumer situations. Prerequisites: SWRK—300, BIOL—025, and PSYC—220. (ATTR: ARTS)

+ SWRK—315. Social Work Practice with Organizations and Communities 3 Credits

This course applies social work practice knowledge, values, ethics, and skills to working with organizations and communities. Emphasis is placed on how diversity can influence work with these systems and on practice approaches and skills used to enhance people's well-being and ameliorate environmental conditions that adversely affect such systems. Prerequisite: SWRK 200 (ATTR:ARTS)

+ SWRK—320. Social Work Practice with Individuals and Families 3 credits

This course provides an overview of the knowledge, skills, values and ethics of generalist social work practice with individuals and families. Course content focuses on the stages of problem solving including engagement, data collection, assessment, intervention, evaluation, and termination. Emphasis is placed on how problem solving is applied when working with people from diverse backgrounds. The roles, values and ethics of social work are discussed in relation to practice situations involved in working with micro and mezzo systems. Prerequisite: SWRK—301.

+ SWRK—410. Field Education I 4 credits

Students complete 200 hours of field experience in an approved, supervised social service organization that prepares them for generalist practice. Students also attend a two-hour, weekly integrative seminar on campus to explore practice and professional development issues related to academic and community-based field learning. A one-time, two-hour lab workshop (SWRK—491-see course description) is also included. Prerequisite: SWRK—320. (ATTR: ARTS)

+ SWRK—415. Social Work Practice with Groups

This course focuses on knowledge, skills, values and ethics competencies in social work practice with treatment and tasks groups. Cultural competence is emphasized in working with group members of diverse backgrounds as well as strategies for the promotion of social justice through groups. Prerequisite: SWRK--320 (ATTR: ARTS)

+ SWRK—420. Field Education II 5 credits

Students complete an additional 200 hours of field experience in their field education organizations. They also continue the two-hour, weekly integrative seminar on campus in which they further explore practice and professional development issues. Prerequisite: SWRK—410. (ATTR: ARTS)

+ SWRK—430. Social Work Research 3 credits

This course provides knowledge and skills in research methodologies used by social workers, with particular emphasis on developing research skills at the baccalaureate level of practice. Content covers values and ethics, critical thinking, culturally competent research methods with populations at risk, the scientific methodology of research as well as practice and program evaluation techniques. Prerequisite: ATDV—110. (ATTR: ARTS)

+ SWRK—440. Social Welfare Policy 3 credits

This course provides a systematic analysis of a range of social welfare policies and programs and their impact on individuals, families, groups, organizations and communities. Through the use of analytical and experiential learning, emphasis is placed on developing policy practice skills to promote social and economic justice, equality, equity and human rights within the context of political, legislative and community processes. Prerequisites: POSC—100 or 205. (ATTR: ARTS)

+ SWRK—491. Child Abuse, Neglect, and Maltreatment/Mandated Reporting Workshop 0 credits

This two-hour lab provides students with knowledge of the definition of child abuse, maltreatment and neglect, according to NYS Family Court and Social Services Law, and explores the legal and ethical implications of the law for practitioners. Co-requisite: SWRK—410. (ATTR: ARTS)

## Elective Courses

### SWRK—452. Social Work Practice: Drugs and Alcohol 3 credits

This course provides a review of the fundamental aspects of alcoholism and drug abuse in contemporary society, particularly as they relate to generalist social work practice. Areas to be covered include: a historical perspective of intoxicants, the psychopharmacology and biochemistry of alcohol and substance abuse, models for understanding addiction, family dynamics related to chemical dependency, treatment aspects of alcoholism and chemical dependency, and a history of legislation, policy and legal issues pertaining to alcoholism and substance abuse. (ATTR: ARTS, HSMR, JMN)

### SWRK—453. Social Work Practice: Grief, Loss, Death, and the Dying Process 3 credits

This course discusses generalist social work practice and effectively responding to grief, dying and death in contemporary society. Emphasis is placed on the grieving process, the impact of culture on mourning rituals, death and burial rites, coping with sudden death, terminal illness, talking with children about death, widowhood, and euthanasia. (Course limited to juniors and seniors). (ATTR: ARTS, HSMR)

### SWRK—454. Health Care Communication Skills 3 credits

This course explores the knowledge and skills necessary for effective interpersonal communication, as they relate to working effectively with others in a therapeutic health care relationship. Emphasis is placed on self-awareness, skill development exercises, and the roles of diversity and culture in shaping the communication process. Contemporary topics in health care communication are integrated throughout, such as health literacy and use of technology-mediated communication. Concepts and techniques taught will be demonstrated and practiced in class and applied through assignments. This course covers content often found in medical school communication training. Restricted to BIBA majors with senior standing. (ATTR: ARTS)

### SWRK—466. Topics in Social Work 3 credits

Faculty present a special topic for intensive study and discussion. Open to majors and other students with permission of the instructor. Consult fall and spring schedules for specific information. This course may be taken more than once with different content. An additional fee may be required, depending on the topic offered. (ATTR: ARTS)

### SWRK—499. Independent Study in Social Work 1— 3 credits

Qualified students are encouraged to undertake an independent study project in their junior or senior year. Such a project requires the approval of the faculty member supervising the project and the department head. The student qualifies for credits by the submission of a satisfactory written report. When appropriate, an examination may be required. Students are limited to no more than one independent study project in any academic year. (ATTR: ARTS)

## Sociology Department

Chair: Dr. Duane A. Matcha, Prof.

Prof.: Dr. Paul T. Murray, Dr. Andrea E. Smith-Hunter

Assoc. Prof.: Dr. Suvarna Cherukuri, Dr. Mathew B. Johnson '93

Asst. Prof.: Dr. Sudarat Musikawong, Dr. Beverly J. Thompson

Visiting Asst. Prof.: Dr. Ann K. Hill

Mission: The Department of Sociology prepares students to be critical observers and engaged participants in the social world. We are committed to teaching, mentoring, advising, and engaging in collaborative research with students. Through these relationships, the Department develops in students the requisite skills for engaged citizenship as well as professions and careers that employ sociological insight. The program emphasizes preparation for graduate-professional studies and employment in sociology, mass communications, criminal justice, law, health professions, education, environmental policy, public policy, urban planning, community organizing, community development, human services and the business world.

### Requirements for the Major, B.A. in Sociology (36.000 credits):

SOCI 101 - The Sociological Perspective

OR

SOCI 120 - Global Social Problems

OR

SOCI 130 - The Family

3 cr.

SOCI 304 - Research Methods I	3 cr.
SOCI 306 - Research Methods II	3 cr.
SOCI 390 - Social Theory Seminar	3 cr.
Senior Capstone	
SOCI 490 – Seminar in Sociology	3 cr.
SOCI 495 – Senior Capstone Thesis	3 cr.
Must complete four courses with a SGLB attribute	12 cr.
Sociology Electives	6 cr.
<b>Auxiliary (6.000 credits)</b>	
ATDV 110 - Statistics for Social Science	<b>OR</b>
QBUS 200 - Business Statistics I	4 cr.
ECON 102 – Principles of Economics, Macro	3 cr.

**Requirements for the Minor, Sociology (18.000 credits):**

Minor will consist of at least six courses (18 credit course) in Sociology, which must include **one** of the following: SOCI 101 - The Sociological Perspective, SOCI 120 – Global Social Problems, SOCI 130 - The Family

In addition, students will take four advanced courses (12 credit hours) from SOCI 201 through 499, and one additional course (3 credit hours) at any level.

Departmental Colloquia: All Sociology Majors are expected to attend at least one of four colloquia on career and research topics offered annually by the department.

Education Certification: Sociology majors seeking initial teaching certification (grades 7-12) in Social Studies should consult the Education Department head for specific requirements in Education. They must meet all the requirements listed above, except that they are only obliged to take a total of 30 hours in Sociology. The following are also required: Three hours in Economics, three hours in Political Science, and 21 hours in History, including the College core requirement of three hours in History. The program must include six hours in each of three areas: European History (e.g., HIST—101 or 190, 201, 202); United States History (e.g., HIST—203, 204); non-Western History, as well as three hours in NY State history (HIST—327). Finally, six hours of college language other than English are required. American Sign Language (ASL) is accepted as fulfilling this requirement. The Sociology Department requires a minimum 3.1 GPA overall and a minimum 3.1 GPA in Sociology courses for Sociology majors seeking certification in Education.

**Description of Courses**

There are no prerequisites for SOCI—101 through SOCI—290.

SOCI—101. The Sociological Perspective (theme varies) 3 credits

An introduction to the basic principles and perspectives of sociology through examination of a social theme selected by the instructor. Themes reflect a particular intellectual interest or focus of research of the faculty member. Examples of potential themes include but are not limited to: global warming, business and corporate social responsibility, race and racism, sex and gender, hate groups, the 1960s, social problems, state and democracy, civic engagement, health and illness, and so forth. (ATTR: ARTS, CAS, CDS)

SOCI—120. Global Social Problems 3 credits

The study of those socially constructed institutions, beliefs, and conditions that result in differential outcomes within various populations in countries around the world. The course employs appropriate sociological theories and methodologies as it addresses not only the cause of social problems, but also their interrelationship with other problems as well as possible solutions. (ATTR: AMSB, ARTS, FSSY, LSRG, CDS)

SOCI—130. The Family 3 credits

This course will introduce students to the sociological concepts and issues within contemporary family sociology. The intersections between the family and other social institutions will be a central component of this course. Diversity of families will be another central foundation for this course. Issues of privilege and inequality will be explored, as well as social justice as it pertains to families. (ATTR: AMSB, ARTS, LSRG, CDS, WSTU)

SOCI—140. Cultural Anthropology 3 credits

A study of humankind, its primate background, evolution, and earliest appearance. The meaning of culture, its growth and development with a cross-cultural investigation of family type, kinship organization, life cycle, subsistence pattern, human ecology, and cultural change will be pursued. (ATTR: ARTS, CAS, GLST, LSRG, MCCP, CDS)

**SOCI—150. American Indians 3 credits**

A study of the impact of European intrusion on the history and culture of the American Indians. Consideration will be given to the relationship between the Indian peoples and the United States government and the consequences of its policies as well as the Indians' efforts to maintain their cultural identity. (ATTR: ARTS, AMSB, LSRG, MULT)

**SOCI—160. Environment and Society 3 credits**

An introduction to the social aspects of environmental problems and solutions. It examines the ways in which social institutions and lifestyles lead to environmental deterioration. It also looks at the consequences of environmental decay for human health and well-being. It examines efforts to preserve the natural environment through the Environmental Movement, drives to save particular ecosystems, and changes in thinking about environmental issues. Same as ENVA—140. (ATTR: ARTS, GLST, LSRG)

**SOCI—170. Popular Cultures 3 credits**

The course examines the political economy of popular culture, studying the workings of domination and transgression in popular culture and everyday life. The sociological study of popular culture includes the deconstruction of youth sub-cultures, fashion, music, mass media, amusement parks, advertising, entertainment, and leisure. Students explore not only image and representation but popular culture as everyday social practices. Central to sociology's study of popular culture are social movements, deviance, and social deconstruction. Curriculum and assignments examine both cultural production and consumption. (ATTR: ARTS, LSRG)

**SOCI—180. Area Studies 3 credits**

This course surveys the cultures and societies of a specified region of the world (Asia, South Asia, Africa, the Middle East, South American, the Caribbean, Australia, etc.). It covers the major institutional sectors (such as family, education, religion, politics, etc.) and social processes (such as urbanization and economic development). It also examines internal and external forces of social change in these societies. May be taken more than once with different content. (ATTR: ARTS, ISP, LSRG, MULT)

**SOCI—190. Crime and Justice 3 credits**

This course will examine various components of the Criminal Justice System: law enforcement, courts, and corrections. Students will adopt a critical approach to the understanding of crime and justice in America by looking at the intersection between race, class, and gender. (ATTR: ARTS, LSRG)

**SOCI—210. Race and Ethnic Relations 3 credits**

A critical examination of the relations of racial, ethnic, and religious groups in modern societies. This course will explore the implications of these relationships in regards to wealth, power, and social status. It also will cover problem areas such as prejudice, discrimination, and racism. (ATTR: AMSB, ARTS, MCCP)

**SOCI—220. People, Protest, Social Movements 3 credits**

A sociological approach of contemporary social movements with particular emphasis on grass-roots civic movements and their role in social change. An examination of current empirical and theoretical issues in the study of social movements and the political, organizational, cultural, economic, and other factors that shape emergence, development, and participation in social movements. (ATTR: ARTS, FSSY)

**SOCI—230. Gender, Power, and Society 3 credits**

Critical analysis of the social construction of gender and its intersections with other relations of power, such as race, class, and sexuality. Examining issues of gender and power in a transnational context. (ATTR: ARTS, MULT, SGLB, WSTU)

**SOCI—240. Growing Older in a Global Environment 3 credits**

Using the aging process in the United States as a beginning point, this course transcends national borders to explore aging in a variety of nations, delineated primarily by their economic level of development. Aging populations in these countries are examined on a multiplicity of levels that include demographic changes, health characteristics, family relationships as well as the economic and political implications of this process on the larger society. (ATTR: ARTS, CFD, GLST, HSMR, SYUR, SGLB)

SOCI—260. Deviance 3 credits

An examination of the nature of deviance, the dominant theories for explaining deviant behavior, and the implications of these theories for its control. Several examples of deviance will be discussed, with emphasis on the social factors related to their occurrence and the utility of various theories in their explanation.. (ATTR: ARTS, LSRG)

SOCI—280. Childhood 3 credits

A study of the status of the child, from the beginning of life to the twelfth year inclusive. The interaction of children with social institutions such as family, school, religion, economics, etc. will be investigated, as well as certain problems of childhood in contemporary America, with cross-cultural comparisons. (ATTR: ARTS)

SOCI—290. Visual Sociology and Anthropology 3 credits

This course is about what is seen and how we see by focusing on the power of visual representation. The course examines the production, circulation, and interpretation of the visual to reveal aspects of society operating on both the individual, social group/organizational, societal, and global scales. Substantive questions are explored through individual and group projects engaged in social documentation (photography, video, and multimedia online). The course may visit the New York State Museum, examine urban spaces, advertisement, and watch ethnographic film. (ATTR: ARTS)

SOCI—300. Political Sociology 3 credits

The course will examine the theoretical and ideological debates related to power, state, civil society, nationalism, democratization, and globalization. Students will also examine social identities like class, race, gender, sexuality, and religion and their intersection with various political institutions. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, SGLB, SYUR)

SOCI—304. Research Methods I 3 credits

An introduction to the processes and techniques of social research, including instruction in hypothesis formation, measurement, questionnaire construction, sampling, survey research and participant observation. A proposal which demonstrates a student's ability to construct a research design is required. Prerequisite: ATDV - 110 and SOCI—101 or SOCI—120 or SOCI—130. Students will be required to take ATDV 110 either before taking SOCI 304 or simultaneously with SOCI 304. (ATTR: ARTS)

SOCI—306. Research Methods II 3 credits

This course will examine basic techniques for collecting, interpreting, and analyzing qualitative data. Research strategies like ethnography, narrative analysis, text or discourse analysis, visual analysis, case study, grounded theory, oral/life history, focus groups, etc. will be examined. Students will be required to do a project that will be based on qualitative methodology. Students will also address issues of ethical responsibility while conducting qualitative research. Prerequisite: ATDV - 110, SOCI—101 or SOCI—120 or SOCI—130 and SOCI—304. Students will be required to take ATDV 110 either before taking SOCI - 306 or simultaneously with SOCI-306. (ATTR: ARTS)

SOCI—310. Theories of Criminology 3 credits

This course traces the historical development of major schools of thought in criminology (Classical Theory to more recent theories in feminist criminology and postmodern criminology). Emphasis will be placed on student's ability to critically analyze these theories and their underlying assumptions. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS)

SOCI—320. Global Cities 3 credits

Examination of the sociological character of cities, approaches to studying cities and urbanization, and social problems unique to cities. Analysis of urban growth/decline, global social/political/economic forces on cities, and the variety of urban social environments. Examination of social organization, culture, power, planning and governance, and the future of the global city. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, SYUR, SGLB)

SOCI—321. Rural Sociology 3 credits

This course has a significant focus on the challenges faced by people and communities dealing with poverty in rural North America. It critically examines community development and community needs/challenges unique to a rural setting. This is a travel/ immersion course with the travel being done in August of the sophomore year to a rural community outside Siena's immediate geographic region. Prerequisites: SOCI—101 or SOCI—120 or SOCI—130.

**SOCI—330. Sociology of Organizations and Work 3 credits**

The study of formal organizations in a comparative framework. The course will examine the social causes of the development of formal organizations, analyze the internal structure of some types of formal organizations such as corporations, government agencies, hospitals, and universities, and look at the impact of that structure on the achievement of individual, organizational, and societal goals. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, SYUR)

**SOCI—350. Wealth and Power in Contemporary Society 3 credits**

This course examines the social mechanisms through which power, wealth, and prestige are distributed in contemporary societies with special attention to such major determinants as race, sex, property, and occupation. Some time will be spent on the consequences of the class structure for lifestyle. The course also examines rates and patterns of social mobility in modern societies. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, FSSY, SYUR)

**SOCI—360. The Social Impact of the Mass Media 3 credits**

This course is a sociological examination of media communication, production, and text/content. Media institutions and uses are important aspects of the social experience and ways of knowing our histories and social positions in society. This course combines theory and practice. In this course we integrate critical approaches on media as culture and industries with student projects that take on media production in audio, visual, and digital communications technologies. The course examines the often unequal social relations embedded in how we access media, negotiate the meaning behind media messages, interact with media, use media, and dispose of toxic technological hardware. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, CFJ, SGLB)

**SOCI—370. Health and Illness 3 credits**

This course provides the intellectual foundation upon which the social characteristics and implications of health and health care are understood in the United States and other industrialized nations. This foundation is based on an analysis of key social factors and actors including health and illness behavior, the sick role, mental illness, physicians, nurses, alternative practitioners and practices as well as the role of the hospital and medical terminology. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, GLST, HSMR, SYUR)

**SOCI- 375 Health Care in the Developed World 3 credits**

This course examines health care systems, their policies and outcomes throughout the developed world. The delivery of care, organizational structure, the impact of political and economic characteristics as well as health outcomes within populations provide the framework within which health systems are analyzed. In addition, the impact of health care policies on the larger society as well as emerging trends and problems are explored. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, GLST, SGLB)

**SOCI—376. Health Care in the Developing World 3 credits**

Beginning with the two developing countries (China and India) that together represent forty percent of the world's population, this course takes students beyond the confines of allopathic medicine and into a world where traditional medicine and its practitioners provide health care to the general population. A significant component of the course explores the increasing interface between traditional forms of health care and allopathic medicine and the wide-ranging economic, political, and social realities that fragment populations and the impact of these realities on health and health outcomes. Prereq: SOCI-101 or 120 or 130. (ATTR: ARTS, GLST, SGLB).

**SOCI—380. Population Problems 3 credits**

A study of population trends across the world. The course will be organized around three basic variables: fertility, mortality, and migration. Prerequisite: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, GLST, SYUR, SGLB)

**SOCI—385. Topics in Sociology 3 credits**

This course concentrates on one area of sociological research or theory not covered in regular course offerings. May be taken more than once with different content. Consult Fall and Spring schedules for specific topics. Prerequisites: SOCI—101 or SOCI—120 or SOCI—130. (ATTR: ARTS, SGLB)

**SOCI—390. Social Theory Seminar 3 credits**

An analysis of sociological thought with an emphasis on those theorists and concepts that have had great impact on modern sociological theory and research. (ATTR: ARTS)

SOCI—400. through SOCI—499 require junior or senior status and nine credits from SOCI—201 through SOCI—385, or consent of the instructor.

The senior thesis is a part of the 1-year capstone sequence. Students will write a research paper, 25-30 pages in length, addressing an area of special interest to the students. The paper will be based on original scholarly work, data collection, or an internship field study. Students should have their thesis topic selected during the fall semester of their senior year in SOCI 490 (Senior Capstone Seminar). Prerequisites: Senior standing (90 hours) SOCI 101/ SOCI 120/SOCI 130/ SOCI 140 and SOCI 304, SOCI 306, SOCI 390, SOCI 490.

\*\*\*SOCI—470. Practicum in Sociological Research 3 credits

This course is designed to give the student experience in doing research by working in a professional research project being carried out by the instructor. Depending on the particular project, the student may acquire skills in sampling research design, data collection and measurement, data analysis, and research report writing. (ATTR: ARTS)

SOCI—480. Internship in Sociology 3 credits

This course provides field experience in community service agencies, research organizations, advocacy groups and business firms. The student will work for at least ten hours per week under the direction of a professional supervisor in the sponsoring organization. In addition, the student will meet periodically with a member of the Sociology Department faculty and will prepare a written report at the end of the internship. Only seniors and juniors with a grade point average of at least 2.75 will be eligible. No student can enroll for more than two internships during his or her college career. Prerequisites: 12 credits in Sociology and permission of the supervising faculty member. (ATTR: ARTS, INT)

SOCI—490. Seminar in Sociology 3 credits

A special topic will be selected for intensive study and discussion. Consult fall and spring schedules for specific information. May be taken more than once with different content. (ATTR: ARTS)

SOCI—495. Senior Capstone Thesis 3 credits

The senior thesis is a part of the 1-year capstone sequence. Students will write a research paper, 25-30 pages in length, addressing an area of special interest to the students. The paper will be based on original scholarly work, data collection, or an internship field study. Students should have their thesis topic selected during the fall semester of their senior year in SOCI 490 (senior capstone seminar). Prerequisites: Senior standing (90 hours) SOCI 101, SOCI 120, SOCI 130 or SOCI 140 and SOCI 304, SOCI 306, SOCI 390 and SOCI 490. (ATTR: ARTS)

SOCI—499. Independent Study 1 - 3 credits

Qualified students are encouraged to undertake an independent study project in their junior or senior year. Such a project requires the approval of the faculty member supervising the project and the department head. The student qualifies for his or her grade and credits by the submission of a satisfactory written report. When appropriate, an examination may be required. Students are limited to no more than one independent study project in any academic year. (ATTR: ARTS)

# School of Business

Dr. Frederick DeCasperis '70, Interim Dean

Dr. John C. O'Neill, Associate Dean

Mr. Jamie S. Casline, M.S., Assistant Dean for Administration

Ms. Diane J. Hannahs, M.S., Assistant Dean

Mr. Michael J. Hickey, M.B.A., Executive in Residence and Executive Director, Center for Innovation and Entrepreneurship

Ms. Elaine M. Phelan, Director of Master of Science in Accounting

Dr. Charles F. Seifert, Executive Director, Institute for Leadership Development

The School of Business, accredited by the prestigious accrediting body AACSB International, offers undergraduate programs in Accounting, Economics, Finance, Management and Marketing. Certificate programs are available in two areas: Accounting, and the International Studies, Foreign Language and Business Program. Minors are offered in Business, Economics and Management. The School of Business also administers the Health Services Administration minor.

**Mission:** The School of Business places paramount importance on teaching students who seek a business degree steeped in Franciscan, Catholic and liberal arts traditions. We prepare our students with the analytic, communication, leadership, teamwork and learning skills necessary to help their organizations solve complex problems while thoughtfully considering the impact on all stakeholders and the natural world. We accomplish this through: the delivery of high quality programs, developed through continuous assessment, reflection and improvement of our curriculum; the recruitment, retention and support of faculty and staff who are dedicated to teaching excellence, professional development, service to our community, and scholarship that advances knowledge of business theory, practice and pedagogy; and, the promotion of open and honest dialogue with students, alumni, community leaders and academic partners.

**Vision:** To succeed in the future, we strive to provide an education that is differentiated and continuously improving in order to prepare students for the dynamic global business environment; offer multiple opportunities for challenging applied learning experiences within our academic programs; articulate, integrate and apply Siena's Franciscan and liberal arts traditions to our teaching, research and service; enhance the interaction and collaboration among faculty and students; and, maintain an open and honest dialogue with all of our stakeholders.

In support of our mission and vision: The School of Business provides intellectually challenging educational programs in Accounting, Economics, Finance, Marketing and Management. Students are exposed to teaching strategies and modes of evaluation designed to emphasize active learning, collaborative activities, and critical and creative intellectual inquiry.

In support of the College's liberal arts and Franciscan mission, the School of Business strives to empower its students to address the challenges of an ever-changing world and a diverse society. Study in the liberal arts serves to inculcate and nurture the importance of life-long learning in our students. The Franciscan values imparted to our students provide a moral compass for future behavior.

The School of Business requires students to master the foundation and functional knowledge and perspectives common to all business disciplines. Students are expected to develop the ability to define and synthesize, to form independent, well-reasoned judgments, and to understand common business research methods and practice. Students will attain discipline-specific knowledge through studies in their major field.

**Learning Goals:** The School of Business provides intellectually challenging educational programs in Accounting, Economics, Finance, Management and Marketing that empower our students to address the challenges of an ever-changing world and a diverse society. Each School of Business graduate will attain the following outcomes:

## Problem Solving

Think critically and creatively to solve complex organizational problems, using appropriate and analytic and quantitative techniques while integrating knowledge and skills from various disciplines.

## Communication

Communicate orally and in writing using language appropriate to the audience.

#### Teamwork and Leadership

Demonstrate respect, responsibility, and a focus on serving others as a leader and team member.

#### Moral Consideration

Work toward a just, peaceable, and humane solution with thoughtful consideration of the impact on all stakeholders, the external environment, and the natural world.

#### Life-Long learning

Pursue opportunities that provide growth as an individual and as an organizational member.

#### Business Specialization

Develop competency in a chosen business discipline.

Teaching and learning are of paramount importance. The faculty should:

- offer students the opportunity to be known as individuals;
- use a wide variety of teaching and learning techniques and the diversity of skills necessary for critical and creative intellectual inquiry;
- challenge students to work toward attaining their best performance levels;
- utilize the curriculum to help students identify the ethical dimensions embedded in business decisions;
- provide opportunities throughout the curriculum for students to enhance written and oral communications;
- immerse students in a learning environment which blends current business theory and practice.

Student learning is enriched by faculty and student interaction with business, non-profit, and government enterprises through means such as international and domestic student internships, faculty externships, and business speaker series.

The School of Business is composed of a dedicated faculty of teachers who are accomplished classroom instructors, who provide a blend of theoretical and practical aspects of their discipline and who primarily engage in pedagogical and applied business activities and profession/community service on a regular basis. School of Business faculty members believe teaching and scholarly activities are interrelated. Scholarly activity increases faculty effectiveness in the classroom by enabling faculty members to incorporate the latest business theories and practices in their teaching. In this light, the business faculty conducts research to enhance teaching, improve management practices, and contribute to the body of knowledge in various management disciplines.

Curriculum: Students in the School of Business take college core courses; pre-business foundation and skills courses; common business core courses; courses in a chosen major and electives for a total of 120 credit hours.

Liberal Arts and Science Requirements: College wide core and other liberal arts and science electives and requirements.

#### Pre-Business Foundation and Skills ( 12.000 credits AND 5 courses )

ECON 101 - Principles of Economics, Micro		3 cr.
ECON 102 - Principles of Economics, Macro		3 cr.
QBUS 100 - Math for Decision Making I		3 cr.
QBUS 110 - Math for Decision Making II		3 cr.
CSIS 010 - Intro to Computer Applications	OR	3 cr.
CSIS 011 - Problem Solving With Spreadsheets	OR	1 cr.
CSIS SXX - Spreadsheet Exam		1 course

#### Business Core ( 31.000 credits AND 10 courses )

ACCT 200 - Financial Accounting	3 cr.
ACCT 205 - Managerial Accounting	3 cr.
BLAW 200 - Legal Environment of Business	3 cr.
BUDV 450 - Organizational Strategy	3 cr.
CSIS 114 - Management Information Systems*	3 cr.
FINC 301 - Managerial Finance I	3 cr.
MGMT 211 - Management Principles	3 cr.
MRKT 212 - Marketing	3 cr.

QBUS 200 - Business Statistics I*	4 cr.
MGMT 300 - Operations Management	3 cr.

\*Counts as liberal arts/science credit

All students are encouraged to take advantage of the academic opportunities offered within Siena College including minors, study abroad programs, and the Honors Program. To aid students in accomplishing their educational and career goals, students are encouraged to meet periodically with their advisors.

**Major Course Requirements:** Major requirements are listed under the individual departments.

**Requirements for the Minor, Business (18.000 credits):**

ACCT 200 - Financial Accounting	3 cr.
ACCT 205 - Managerial Accounting	3 cr.
FINC 301 - Managerial Finance I	3 cr.
MGMT 211 - Management Principles	3 cr.
MRKT 212 - Marketing	3 cr.
ECON 101 - Principles of Economics, Micro	OR
ECON 102 - Principles of Economics, Macro	3 cr.

Students majoring in business may not select the Business Minor.

Students should complete the quantitative reasoning requirement through either QBUS 100, MATH 010, MATH 110 or other equivalent college level coursework. Those pursuing a B.A. in Economics who want a business minor are required to take an additional School of Business course at the 300 level or above from any department except Economics. No course used to fulfill the business minor may be taken pass/fail.

Education Certification: School of Business majors seeking initial teaching certification in Business and Marketing (all grades) should plan their program jointly with their advisor and the Education Department at Siena. To be admitted to this certification program, students must have an overall grade point average of 3.0, with a 3.0 grade point average in the major.

**School of Business Courses**

BUDV—201. Global Business Environment 3 credits

A survey course designed to introduce students to the cross-cultural and global economic issues that have an impact on doing business. Through projects and case studies, students will explore the impact of cultural and economic differences on how business decisions are made. (ATTR: GLST)

BUDV—305. Business Ethics 3 credits

An examination of ethics in business and work. Among the topics to be addressed are: recognizing and analyzing ethical issues in business; promoting ethical behavior in corporations and institutions; the social responsibilities of business; the role of business in a free market economy; ethics in the global economy; the role of the professions in contemporary American society. Prerequisite: Junior standing. (ATTR: BUS)

BUDV—310. Entrepreneurship and New Venture Creation 3 credits

An introductory course concentrating on how new venture opportunities are identified and assessed. Special attention is given to exploring the unique role of entrepreneurship and innovation in society. Course content focuses both on understanding the historical, social, and ethical context of entrepreneurship and in seeking, assessing and developing new venture opportunities. Students will learn alternative approaches to finding new venture opportunities and assessing the viability of those opportunities. Prerequisites: ACCT—205; MRKT—212. (ATTR: BUS)

BUDV—410. Entrepreneurship and Small Business Development 3 credits

An advanced course in entrepreneurship focusing on developing, planning, financing and launching new business ventures. The course will require students to integrate the functional areas of business in developing, writing and presenting a real business plan for an entrepreneurial start-up or an existing small business. Prerequisite: BUDV—310. (ATTR: BUS)

**BUDV—420. Global Connection 1-3 credits**

An academically oriented study of international business in a region outside the United States, this specially designed course offers credit for an intense two-week study program in a region outside the United States. This travel experience is preceded by orientation lectures and followed by supervised research into one aspect of the field study. Students will tour factories, retail outlets, education institutions, and financial markets. They will meet with business executives, business faculty, and government officials. They will examine issues including how marketing approaches vary among countries, how culture influences the manner in which business is conducted, and how government and trade regulations affect overall economic structure. Travel costs paid by student. Cost varies each semester. Students will be graded on a pass/fail basis. Prerequisite: This course is open to all students who have completed at least two international business courses. (ATTR: BUS, GLST)

**BUDV—440. Visiting Executives Forum 3 credits**

Visiting executives will discuss their companies' goals and objectives and how their functional tactics and control methods support their strategies. The course content will integrate the functional areas of business as influenced by global competition and rapid technological change while optimizing the contribution of managers and employees. Open to seniors in the School of Business or by permission of instructor. (ATTR: BUS)

**BUDV—450. Organizational Strategy 3 credits**

This course deals with the development and implementation of organization strategy. It focuses on the perspectives, analytical techniques, and capabilities utilized by business professionals to improve an organization's probability of attaining sustainable competitive advantage and success in the long term. It is considered a capstone course, which implies that students will be asked to integrate much of what they have learned in other courses into the analytical and decision-making processes. In this course, students will be expected to integrate knowledge and skills from courses in the business core, work effectively in teams, demonstrate leadership skills, communicate effectively, engage in the analysis of complex business situations, and make enlightened decisions based upon reasoned judgments. This is a multidisciplinary course, emphasizing the development of strategies that integrate accounting, financial, economics, and marketing, and management considerations. The course will be taught by professors from a variety of disciplines, but always with an emphasis on multi-disciplinary integration. This course must be taken and completed successfully at Siena. Prerequisites: *Successful completion of all courses in the business core.* Open only to senior School of Business students. (ATTR: BUS)

**BUDV—482. Internship in Business 3 credits**

Field study experience in subject areas covered by the departments of Accounting, Economics, Finance, and Marketing/ Management. Students will explore career opportunities and field work experience related to their major field of study, working 120 to 150 hours per semester for each 3-credit internship. Students will be graded on a standard grading scale. Students will be required to maintain a field experience journal, attend scheduled classroom seminars, and complete a final report or project. BUDV—482 may be taken twice for a maximum of 6 credits, which do not count toward credits earned in a student's major field of study. Prerequisites: To enroll in an internship, students must have completed a minimum of 45 credits (including at least 12 credits in the Business Core) with a cumulative grade point average of 2.5 or above and receive permission of the School of Business internship coordinator. Students wishing to enroll in a summer internship must have completed a minimum of 75 credits.(ATTR: BUS, INT)

**BUDV—499. Independent Study in Business 1 - 3 credits**

This course provides an opportunity for seniors with a 3.0 or above to pursue independent study in a business area that does not fit within a single department's guidelines. The permission of a faculty member and the Dean is required. (ATTR: BUS)

**BUDV—779. Topics in Intercultural Understanding, Business 4 credits**

This course, offered in a foreign country, is an intensive study of specific topics associated with international internships. The nature of the student's research will determine which School will award credit. The course will typically involve a high degree of independent research, oral presentations by the students, and a well-documented writing assignment. Besides the specific research coordinated with an internship, the course will emphasize issues in intercultural communication. A student will earn four credits for this course. (ATTR: BUS)

**BUDV—781. International Internship, Business 3 - 8 credits**

A student may earn 3-8 credits by serving as an intern in a foreign country. Placements are available for students from each School. The nature of the internship will determine which School will allocate credit. Typical opportunities include work in parliaments, law offices, theatres, museums, non-profit organizations, banking, hospitals and businesses. Students will work from 10 to 32 hrs. a week, depending on the program selected. The

internship will involve a sizeable research project linked to the work undertaken. Prerequisites: students must be at least juniors, demonstrate self-motivation, good communication skills and trustworthiness. The GPA requirement is 2.75. (ATTR: BUS, ISP)

## **Accounting and Business Law Department**

Chair: Dr. Katherine J. Silvester, Assoc. Prof.

Prof.: Paul F. Dwyer, Jr., Esq.,

Dr. Leonard E. Stokes, III, Mr. Michael R. Van Patten

Assoc. Prof.: Mr. Robert B. Carmody, Dr. Margaret Garnsey, Ms. Andrea Hotaling, Dr. Eric Lewis,  
Ms. Elizabeth Marcuccio,

Asst. Prof.: Dr. Chester Brearey, Dr. Wanda K. Causseaux, Dr. Sunita Goel, Dr. Donald J. Raux

Director of Master of Science in Accounting: Ms. Elaine M. Phelan

The Department of Accounting is committed to academic excellence. Opportunities for practical experiences complement the academic program of the Department and prepare students to succeed in the business world. The Department strives to increase the students' interest in professional accounting matters, help them develop powers of discrimination and judgment, and encourage the pursuit of lifelong learning through continuing professional education.

The student majoring in Accounting is educated in the advanced principles, theories, and real world applications of accounting and taxation. The Department presents its program as a broad and balanced conception, rather than narrow specialization. The Accounting major is prepared for the fields of industrial accounting, government service or not-for-profit accounting, or entrance into graduate accounting programs, including the Siena M.S. in Accounting program, which fulfills a basic requirement for admission to the licensing examinations for Certified Public Accountancy in New York State. Students are also qualified to sit for the professional examinations to become Certified Management Accountants (CMA), Certified Internal Auditors (CIA), and Certified Government Financial Managers (CGFM).

Accounting majors are encouraged to seek as broad an education as possible. Many accounting majors have successfully completed minors in the liberal arts and sciences including Computer Science, International Business, English, History, Political Science, and foreign languages.

Mission Statement: The mission of the accounting department is to prepare students for entry level accounting and business positions, subsequent career growth, and continuing intellectual and professional development. The department provides a challenging and intellectually stimulating learning environment that emphasizes the analytical, communication, technological and teamwork skills necessary to succeed in the current dynamic business environment. The integration of accounting theory and practice with the college's liberal arts and Franciscan traditions enables students to become responsible and contributing members of society.

## **The Bachelor of Science in Accounting Program and the Accounting Certificate**

The B.S. in Accounting Program offers flexibility within the accounting program and with the business electives so that students can tailor their programs to meet a variety of career objectives or preparation for graduate programs. Students should consult with their academic advisors to determine the appropriate degree path to best prepare them for their career and educational goals.

### **Requirements for the Major, B.S. in Accounting (30.000 credits):**

ACCT 200 - Financial Accounting*	3 cr.
ACCT 205 - Managerial Accounting*	3 cr.
ACCT 300 - Intermediate Accounting I	3 cr.
ACCT 305 - Intermediate Accounting II	3 cr.
ACCT 340 - Taxation I	3 cr.
ACCT 350 - Cost Accounting	3 cr.
ACCT 370 - Accounting Information Systems	3 cr.
BUDV 450 - Organizational Strategy *	3 cr.
Accounting Electives	6 cr.

\*Indicates these courses are part of the Common Business Core

Accounting electives and other business electives will be selected after consultation with an academic advisor to determine the best mix of courses to prepare the student for their career and educational goals. Students planning to attend graduate programs in accounting should take BLAW 210 - Commercial Transactions as a business elective.

**Auxiliary (3.000 credits)**

Any CSIS course 110 or above 3 cr.

**Requirements for the Certificate in Accounting (60.000 credits):**

ACCT 200 - Financial Accounting	3 cr.
ACCT 205 - Managerial Accounting	3 cr.
ACCT 300 - Intermediate Accounting I	3 cr.
ACCT 305 - Intermediate Accounting II	3 cr.
ACCT 340 - Taxation I	3 cr.
ACCT 350 - Cost Accounting	3 cr.
ACCT 370 - Accounting Information Systems	3 cr.
Accounting Electives	9 cr.

Additionally, Students are required to take:

Business Law	6 cr.
Economics	6 cr.
Finance	6 cr.
QBUS 200 - Business Statistics I	4 cr.
Business Electives	9 cr.

Candidates are expected to have computer competence that can be demonstrated through experience or additional coursework in computer science. A minimum of 30 credit hours must be taken at Siena College, achieving an overall grade index of 2.0. At least 15 credit hours of accounting must be taken at Siena (no grade below a C- being acceptable). This program does not grant credit for any required accounting courses that have previously been taken pass/fail. A student must take courses for a letter grade in order to count them towards the certificate program.

The Accounting Certificate Program is intended for students who do not plan to earn the bachelor’s degree or who have already earned a degree in another major. A student who plans to sit for the CPA exam should consult with their advisor regarding education requirements.

**The Master of Science Program in Accounting**

Elaine Phelan, M.S., CPA– Director

**Description of Program**

The Master of Science in Accounting at Siena prepares students for careers in the public accounting profession. The program is a one year full time program consisting of eight three credit hour required classes and two 3 credit hour electives. The program fulfills the 150 hr. education requirements for certification in New York and other states. The curriculum stresses ethical responsibilities, leadership, critical thinking, as well as quantitative skills. Oral and written communication are emphasized.

**Internships**

MS candidates have the opportunity to pursue six credit hours of internships available as elective courses. These internships are located at CPA firms, New York State agencies and other businesses. Internships will allow students to become integrated into an organization’s operations. Students gain a broader view of the accounting profession and will work approximately 120 hours a semester for each 3 credit hour internship.

**Admissions**

Generally accounting majors may apply to the program upon completion of the Junior year. Admissions are conducted throughout the year. The graduate admissions committee will inform applicants of their status once a decision is reached, generally within two weeks of the receipt of a completed application.

**Prerequisites**

Students entering the program must have completed the following courses or their equivalent:

Financial Accounting, Siena ACCT 200	3 cr.
Managerial Accounting, Siena ACCT 205	3 cr.
Intermediate Accounting I, Siena ACCT 300	3 cr.
Intermediate Accounting II, Siena ACCT 305*	3 cr.
Cost Accounting, Siena ACCT 350*	3 cr.
Taxation I, Siena ACCT 340*	3 cr.
Accounting Systems, Siena ACCT 370*	3 cr.
Business Law including Commercial Code, Siena BLAW 310	3 cr.
Computer Science, Siena CSIS 110 or higher	6 cr.
Finance, Siena FINC 301	3 cr.

To be considered for admission, students must have completed or have in progress, all of the above listed courses. Courses require at least a B grade to be considered for admission. If the grade is not at least a B, it may be retaken with permission of the Associate Vice President for Academic Affairs. Applicants with an undergraduate GPA of at least a 3.2 for an accounting degree earned within the preceding five years are not required to submit GMAT scores.

If an applicant possesses a degree from another institution, the degree must have been earned within the last 5 years.

All applicants are required to submit:

- Completed application form
- Official transcripts from all colleges and universities from which credits were earned.
- Official GMAT score results (if required).
- A letter of recommendation written by an accounting faculty member at the bachelor's degree granting institution.
- Current resume, including employment history, certificates or licenses held, volunteer/extracurricular activities, leadership positions and honors/awards
- \$50.00 fee (waived for Siena College applicants)

### **Transfer Credits**

Students desiring graduate transfer credit must present a written request to the Director for transfer evaluation. Transfer credit will be accepted only for those graduate courses with earned grades of at least a "B". No more than 6 credit hours may be transferred.

Graduate Accounting students at Siena College who wish to take graduate course work at another college or university must have prior written permission from the Director. The college must be AACSB (The Association to Advance Collegiate Schools of Business) accredited.

### **Academic Standing and Grading**

Students must maintain an overall grade point average of at least 3.0 to remain in good standing in the program. A GPA of at least 3.0 is also required for graduation. Students with a cumulative grade point average below 3.0 will be permitted to register for courses only upon recommendation of the Director of the program. A student whose grade falls below the required 3.0 cumulative index will be put on program probation and will be notified in writing. If permitted to continue, the student must raise his/her grade point cumulative average to at least a 3.0 in the next semester of study. Failure to do so will lead to withdrawal from the program.

Grading in the Master program is limited to the following: A (4); A- (3.7); B+ (3.3); B (3.0); B- (2.7); C (2.0); F (0.0); I (Incomplete); W (Withdrawal).

The "I" grade is assigned according to Siena College policy at the discretion of the instructor. The incomplete grade "I" is assigned to students who have missed a final examination because of illness or some other serious reason. The students must make up the examination within one month after the close of the term at the convenience of the instructor; otherwise the "I" grade is converted to an F. For GPA purposes, "I" grades are calculated the same as F grades. All "I" grades must be reconciled prior to receipt of a degree. Grades appearing on a student's academic record at the time of graduation will not be changed to any other grade subsequent to the graduation date.

Requirements for the Master of Science in Accounting Program (30 credits)		
GBUS 502	Ethics in Business and Society	3 cr.
GBUS 520	Financial Operation	3 cr.
GBUS 540	Quantitative Methods	3 cr.
MACC 500	Advanced Financial Accounting	3 cr.
MACC 512	Seminar in Accounting Research and Communication	3 cr.
MACC 530	Auditing	3 cr.
MACC 542	Advanced Tax Accounting	3 cr.
MACC 572	Computer Auditing and IT Controls	3 cr.
Electives		6 cr.

### Cost

Full-time tuition for the program is \$15,225 (12-16 credit hours) per semester. Part-time tuition is \$1,015 per credit hour.

For additional information on the program, please contact Elaine Phelan at 518-782-6801 or ephelan@siena.edu

## Description of Undergraduate Courses

ACCT – 090. Introductory Topics in Accounting 1-3 credits

This course will be taught with varying subject content in the field of Accounting at an introductory level with no prerequisites. The particular content will be indicated by subtitle. This course is not intended for students within the School of Business and may not be taken for credit by students enrolled in a major offered by the School of Business. School of Arts and School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR:BUS)

ACCT—200. Financial Accounting 3 credits

The first half of the introductory course in accounting emphasizes the role of accounting as an information and communication system necessary for economic decisions. The accounting process, systems and resulting classified financial statements are covered. Financial accounting concepts and practices relating to topics such as current and long term assets, inventories, current liabilities, equity and long term liabilities are included. Prerequisite: QBUS—100 or equivalent (may be taken concurrently); basic computer spreadsheet competency expected. (ATTR: BUS, ISP)

ACCT—205. Managerial Accounting 3 credits

The second introductory course in accounting focuses on the managerial aspect of accounting. The emphasis is placed on internal uses of accounting information to make managerial decisions. The coverage will include topics such as: cost volume profit analysis, cost behavior, activity based costing, short term decision making, income tax considerations, budgeting, responsibility accounting, performance measurement, and cost control. Lab problems required. Prerequisite: ACCT—200. (ATTR: BUS, ISP)

ACCT – 290. Intermediate Topics in Accounting 1-3 credits

This course will be taught with varying subject content in the field of Accounting at an intermediate level. Prerequisite course may be required. The particular content will be indicated by subtitle. It may be taken more for credit multiple times for different topics. (ATTR:BUS)

ACCT—300. Intermediate Accounting I 3 credits

This course is the first in the two-course sequence in Intermediate Accounting. It provides a comprehensive review of the accounting process, a study of the conceptual basis of accounting, and a review of the preparation and understanding of classified financial statements. The course will focus on the study of contemporary accounting theory and the application of generally accepted accounting principles to various specific topics and financial statement items. Prerequisite: ACCT—200. (ATTR: BUS)

ACCT—305. Intermediate Accounting II 3 credits

Continued study of contemporary accounting theory and the application of generally accepted accounting principles to various financial statement items. Prerequisite: ACCT—300. (ATTR: BUS)

ACCT—340. Taxation I 3 credits

A study of the principles of Federal income taxation primarily focused on taxation of individuals. The course includes an introduction to tax research. Reference will be made to state tax laws and to corporate taxation. Lab problems required. Prerequisite: ACCT—200. (ATTR: BUS)

ACCT—350. Cost Accounting 3 credits

The principles and objectives of cost accounting, production control, and inventory control as they relate to the management decision making and control processes within the firm. Prerequisite: ACCT—205. Lab problems required. (ATTR: BUS)

ACCT—370. Accounting Information Systems 3 credits

An introduction to accounting information systems and their roles in the accounting environment. Systems covered include manual accounting, computerized accounting, and Internet electronic commerce applications. Emphasis is upon developing students' abilities to understand the processing of accounting data and the controls that are necessary to assure accuracy and reliability of the data processed by the accounting system. Prerequisite: ACCT—300. (ATTR: BUS)

Note: Accounting electives, 400 series, may only be offered once per academic year.

ACCT—400. Advanced Accounting 3 credits

Continued study of financial accounting theory and practice in selected areas of accounting such as accounting for partnerships and accounting for complex corporate units and multinational enterprises. Lab problems required. Prerequisite: ACCT—305. (ATTR: BUS)

ACCT—410. Current Accounting Topics 3 credits

Study of specialized accounting topics and issues such as the conceptual framework of accounting, changing price levels, forecast and projections, fiduciary accounting, interim and segment reporting, disclosures, and the standard-setting process. Emphasis is on current pronouncements and the researching of accounting issues. Lab problems required. Prerequisite: ACCT—305. (ATTR: BUS)

ACCT—420. Governmental and Not-For-Profit Accounting 3 credits

An introduction to the accounting principles and practices of government and not-for-profit organizations. The course considers fund accounting principles and the unique financial reporting problems important to entities operating within the non-profit area: state and local government, colleges and universities, hospitals, health and welfare agencies, churches and other organizations. Lab problems required. Prerequisite: ACCT—305. (ATTR: BUS)

ACCT—430. Auditing 3 credits

The course will emphasize concepts and principles that enable the student to understand the philosophy and environment of auditing and assurance services. It is an overview of the public accounting profession and the Generally Accepted Auditing Standards utilized by the profession in reporting on the financial statements of enterprises. Prerequisites: ACCT—350 and ACCT—370. (ATTR: BUS)

ACCT—440. Taxation II 3 credits

This course presents the taxation of corporations and its effects on their shareholders. Special tax provisions related to sub-chapter S corporations and partnerships and various aspects of IRS administration and tax practice are included. New York State taxation of corporations and partnerships will be integrated with the presentation. Prerequisites: ACCT—305 and ACCT—340. (ATTR: BUS)

ACCT—450. Advanced Cost Accounting 3 credits

An in-depth study of the principles and objectives of the techniques and theories used in managerial accounting. Topics such as capital budgeting; variance analysis; cost allocation; management control systems and quantitative techniques for planning and control will be discussed. Lab problems required. Prerequisite: ACCT—300 and ACCT—350. (ATTR: BUS)

ACCT—460. Internal and Performance Auditing 3 credits

This course will examine the common body of knowledge needed by internal auditors. Emphasis is placed on the tools and techniques used to assess the economy, efficiency, effectiveness and results of management activity as they are used in government, not-for-profit agencies and the private sector. Prerequisite: ACCT—305. (ATTR: BUS)

ACCT—462. Fraud and Forensic Accounting 3 credits

The course will discuss what constitutes a fraud, how frauds can be committed, how frauds can be uncovered, and some actions accountants and business executives can take to minimize frauds occurring in their organizations. This course meets the Siena College definition of Franciscan Concern: Diversity by considering

matters of race, gender and culture, within the context of the accounting firm being a microcosm of society. This upper level accounting elective is designed as a seminar. Students must have senior status. (ATTR: BUS, CFD)

**ACCT—470. Accounting Systems and Data Processing 3 credits**

An up-to-date and comprehensive treatment of the aspects of accounting systems building with appropriate emphasis on data for decision making. The interrelationships of the functions of recording, processing, and analysis, using the principles of good systems building, are blended with the manual and automated devices. Laboratory required. Prerequisite: ACCT—300, CSIS—114 can be taken as a prerequisite or concurrently with this course. (ATTR: BUS)

**ACCT—472. Computer Auditing and IT Controls 3 credits**

The course explores security and control issues from an accounting and auditing perspective related to technology as it impacts business applications. Topics may include security and control related to e-commerce, internet, and computer auditing. Students will be exposed to a variety of business applications through case studies, and projects. Prerequisites: ACCT—300, FINC—301, CSIS—020 or CSIS—114 or equivalent. Students need an understanding of basic accounting and financial concepts, as well as an understanding of the design and application of Information Systems and Data Bases.. (ATTR: BUS)

**ACCT—490. Seminar: Topics in Accounting 3 credits**

The course is intended to provide opportunities for concentrated study at an advanced level in areas beyond the scope of regular course offerings including topics of current concern and topics specifically identified as meeting specialized interests of students. This course is offered on an irregular basis. It may be taken more than once with different course content. Prerequisites: There are no specific prerequisites. The seminar is an elective open to seniors in accounting. Depending on the topic, specific background might be required, and also it might be cross-listed with other Departments and/or be open to seniors in other majors. Approval of the Instructor is required.. (ATTR: BUS)

**ACCT—499. Independent Study 1 - 3 credits**

A qualified student may pursue a particular project/topic in the field of Accounting in his/her junior or senior year. The project requires the approval of the faculty member involved and the Department Head. A satisfactory written report and/or examination will determine the final grade. Only one independent project may be undertaken in any academic year. Prerequisites: Junior or Senior status. The student must possess adequate preparation in the field that will be studied as determined by the professor.. (ATTR: BUS)

## **Business Law Description of Courses**

**BLAW—200. Legal Environment of Business 3 credits**

The course presents the legal concepts governing the conduct of business in the United States from a managerial perspective including contracts, torts, agency and government regulations. The course is designed to equip managers and other business persons with an understanding of the legal process as it applies to managerial and other business problems. As legal rules frequently change, the emphasis will be on developing independent critical thinking skills. (ATTR: BUS, CFJ, REC)

**BLAW—210. Commercial Transactions 3 credits**

A general survey of the uniform commercial code. Sales: passing of title, risk of loss, financing and security interests, bailments, and carriers. Commercial Paper: negotiation and assignment, holders in due course, defenses, banks, debtor-creditor, and bankruptcy. Property: real and personal, transfers, and financing. Prerequisite: BLAW—200. (ATTR: BUS)

**BLAW—490. Seminar: Topics in Business Law or Business Ethics 3 credits**

This course is intended to provide opportunities for concentrated study at an advanced level in areas beyond the scope of regular course offerings including topics of current concern and topics specifically identified as meeting specialized interests of students. This course is offered on an irregular basis. It may be taken more than once with different course content. Prerequisites: There are no specific prerequisites. The seminar is an elective open to seniors in business. Depending on the topic, it might also be cross-listed with other Departments and/or be open to seniors in other majors. Depending upon the topic being covered and enrollment the course may be open to juniors. Approval of the Instructor is required. (ATTR: BUS)

## Description of Graduate Courses

GBUS—502 Business and Accounting Ethics. 3 credits

The course will involve a critical evaluation of the ethical implications for business and audit decisions. Individual as well as organizational consequences will be explored by examining a variety of cases and real-life situations. Prerequisites: Admission to the Program.

GBUS—520 Financial Operations. 3 credits

The role of the financial manager is examined in context with the legal operating and tax environment of contemporary business firms. Attention is focused on financial analysis and planning, the time value of money, risk-return relationships, cash flow and asset/liability management as well as investment priorities, capital structure, valuation techniques and capital budgeting applications. Special concerns dealing with mergers, restructuring and international finance are also addressed. Prerequisites: Admission to the Program.

GBUS—540 Quantitative Methods and Tools in Accounting. 3 Credits

This course is a study of quantitative methods and tools for accountants. Topics will include the following: sampling theory and techniques for auditing, probability theory, regression analysis including multivariate regression, linear programming and Excel as an advanced problem solving tool. Prerequisites: Admission to the Program.

MACC—500 Advanced Financial Accounting. 3 credits

The course will continue the study of financial accounting begun in the undergraduate experience. Students will be expected to apply prior acquired knowledge to the study of organizations such as partnerships and consolidated corporations. Accounting for international entities and transactions will be discussed along with International Accounting standards. The important role of accountants and auditors in creating, disseminating and explaining financial statements and business transactions is an integral aspect of the course. Prerequisites: Admission to the Program.

MACC—512 Seminar in Accounting Research & Communication. 3 credits

This course will discuss current accounting concepts. Topic material will include discussion of financial accounting pronouncements by FASB, or other prominent accounting standard setting groups. Computerized accounting research tools will be utilized. Students either on an individual or group basis will be expected to pick a topic of interest for which they will conduct further research. Prerequisites: Admission to the Program.

MACC—530 Auditing. 3 Credits

This course covers the role of the auditor, the audit process, the public accounting profession, audit risk and materiality, fraud, audit methods and techniques, audit planning, internal control, the effects of information technology on the audit, auditing revenue, receivables and inventories, professional ethics, legal responsibilities, emerging assurance services and recent developments in the auditing profession. Prerequisites: Concurrent with GBUS 540 Quantitative Methods and Tools in Accounting.

MACC—535 Advanced Auditing. 3 Credits

This course examines auditing concepts and issues in depth. A special focus exists on audit evidence and how auditors make decisions. Some topic areas include ethics, analytical review, fraud and the role of technology. Prerequisites: MACC 530 Auditing or equivalent.

MACC 542 Advanced Tax. 3 Credits

This course provides a more in depth discussion of the taxation of entities other than individuals. Topics include the taxation of Subchapter C or 'regular' corporations and the tax effects of transactions with shareholders: from organization, to operation, to termination or liquidation. Similar tax provisions relating to Subchapter S corporations and partnerships are also covered and compared and contrasted with those of Subchapter C corporations. An introduction to multistate taxation will be made with an emphasis on the taxation of entities in New York State. Coverage of federal gift and estate tax provisions will be incorporated as well. Building on the research skills acquired in the undergraduate taxation course students will research, analyze and communicate conclusions about issues related to the above topics. Prerequisites: Admission to the Program.

MACC—550 Seminar in Advanced Managerial Accounting. 3 Credits

This course involves the in-depth study of advanced managerial accounting techniques and theories. Topics will include the following: working capital, capital budgeting, CVP analysis, decision making, cost allocation, master

budget, variances, responsibility accounting, quality control, benchmarking, strategy, best practices, ethics and other current managerial accounting topics. Prerequisites: Admission to the Program.

**MACC—560 Advanced Financial Reporting Issues. 3 Credits**

This course will involve the study of current accounting topics of interest to the CPA community. These areas could involve new standards published by FASB, IASB, or the AICPA. The topics will integrate practical and theoretical implications of the issues on global economic issues, business, contemporary society and ethical or moral positions. Prerequisites: Admission to the Program.

**MACC—571 Advanced Accounting Information Systems. 3 Credits**

This course overviews current information systems concepts. Students will be instructed in the design and implementation of AIS in a database environment. Some topics addressed by the course are expected to change from year to year as new issues, technologies, etc. emerge. Topics that are covered may be drawn from the AICPA's Top Ten Technologies List. Examples of topics include: Computer Crime, XML (eXtensible Markup Language), XBRL (eXtensible Business Reporting Language) and e-commerce issues such as encryption. Prerequisites: Admission to the Program.

**MACC—572 Computer Auditing and IT Controls. 3 Credits**

This course explores security and control issues from an accounting and auditing perspective related to technology as it impacts business applications. Relevant technology and systems issues will be discussed. Topics may include security and control related to e-commerce, the Internet and computer assisted auditing. Prerequisites: Admission to the Program.

**MACC—582 Graduate Internship CPA: Tax, 3 credits**

Field work experience in Taxation will explore career opportunities in public accounting firms. Students work 120 hours per semester. Prerequisites: Admission to the Program.

**MACC—583 Graduate Internship CPA: Audit, 3 credits**

Field work experience in Accounting/Auditing will explore career opportunities in public accounting firms. Students work 120 hours per semester. Prerequisites: Admission to the Program.

**MACC—584 Graduate Internship Non-CPA: Accounting/Auditing, 3 credits**

Field work experience in Accounting/Auditing will explore career opportunities in corporate and not-for-profit accounting businesses, New York State agencies and local government. Students work 120 hours per semester. Prerequisites: Admission to the Program.

**MACC—585 Graduate Internship Non-CPA: Tax, 3 credits**

Field work experience in Taxation will explore career opportunities in corporate and not-for-profit accounting businesses, New York State agencies and local government. Students work 120 hours per semester. Prerequisites: Admission to the Program.

**MACC—586 Graduate Internship: 3 credits**

Field work experience in Accounting/Auditing will explore career opportunities in public accounting firms, corporate and not-for-profit accounting offices and New York State agencies and local government. Students work 120 hours per semester. Prerequisites: Admission to the Program.

Students may earn a maximum of six internship credits.

**MACC—590 Graduate Seminar: Topics in Accounting. 3 Credits**

The course is intended to provide opportunities for concentrated study at an advanced level in areas beyond the scope of regular course offering including topics of current concern and topics specifically identified as meeting specialized interests of students. This course is offered on an irregular basis. It may be taken more than once with different course content. Approval of the Instructor is required. Prerequisites: Admission to the Program.

**MACC—599 Graduate Independent Study in Accounting. 3 Credits**

A qualified graduate student may pursue a particular project/topic in the field of Accounting. The project requires the approval of the faculty member involved and the M.S. in Accounting Director. Only one independent project may be undertaken in any academic year. The student must possess adequate preparation in the field that will be studied as determined by the professor. Prerequisites: Admission to the Program.

## Economics Department

Chair: Dr. James F. Booker, Prof.  
Prof.: Dr. Linda Richardson, Dr. W. Scott Trees  
Asst. Prof.: Ms. Cruz Bueno, Dr. Arindam Mandal, Dr. Aaron N. Pacitti,  
Dr. Ashley J. Provencher, Dr. Smita Ramnarain

The Department of Economics provides students with an opportunity to study the major economic relationships present in every society. Students will study alternative ways of meeting needs within institutional and resource constraints.

Students who wish to major in economics may choose from two courses of study leading to either a B.S. degree through the School of Business or a B.A. degree through the School of Liberal Arts.

For information on the B.A. degree, please see the economics section **under the School of Liberal Arts**.

The B.S. program is oriented toward the techniques and background appropriate for the business world. It prepares students for graduate work in Business Administration and economic analysis within the business community. Students will explore both theoretical and quantitative analysis, including work with general software and advanced statistical packages.

### Requirement for the Major, B.S. in Economics ( 30.000 credits ):

ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
ECON 201 - Micro-Economic Analysis	3 cr.
ECON 202 - Macro-Economic Analysis	3 cr.
ECON 430 - Econometrics	3 cr.
15 credits Economics electives	15 cr.

Economics electives will be selected after consultation with an academic advisor to determine the best mix of courses to prepare the student for their career and educational goals.

### Requirements for the Minor, Economics (18.000 credits):

ECON 101 - Principles of Economics, Micro	3 cr.
ECON 102 - Principles of Economics, Macro	3 cr.
ECON 201 - Micro-Economic Analysis	3 cr.
ECON 202 - Macro-Economic Analysis	3 cr.
Economics Electives	6 cr.

Please Note: For B.A. and B.S. Economics majors, three Finance courses are cross-listed with Economics and count toward the degree (FINC—212 = ECON—210; FINC—421 = ECON—420; FINC—422 = ECON—320).

## Description of Courses

ECON—101. Principles of Economics, Micro 3 credits

This course introduces students to fundamental economic concepts and theory, including demand, supply, and the formation of equilibrium prices in product and resource markets. In addition, the course offers an introduction to applied fields such as industrial organization (market structures), labor economics, unionism, international trade, and market failure. (ATTR: ARTS or BUS; CAS, ISP, CDS)

ECON—102. Principles of Economics, Macro 3 credits

This course examines the foundations of economic theory as it relates to unemployment, inflation, and economic growth. Topics might include aggregate demand, aggregate supply, market equilibrium, national income accounting, theories of income determination, money and banking, and fiscal and monetary policies. (ATTR: ARTS or BUS; CAS, ISP, CDS)

ECON—201. Micro-Economic Analysis 3 credits

An intermediate-level treatment of the theories of consumer behavior and demand, production and cost, the firm and market organization, and factor markets. Microeconomic topics might include price control, pollution, efficiency, equity, taxes, subsidies, and government regulation. Prerequisite: ECON—101 and ECON—102. (ATTR: ARTS or BUS)

ECON—202. Macro-Economic Analysis 3 credits

An intermediate-level examination of Classical and Keynesian models of income determination, post-Keynesian thought and the Monetarist alternative, and the problems of inflation, employment, and growth. Prerequisite: ECON—101 and ECON—102. (ATTR: ARTS or BUS)

ECON—210. Money and Banking 3 credits

This course is designed to develop the student's understanding of the structure and function of our banking system and the role of monetary policy in determining economic activity. Topics included are: the nature of money, the term structure of interest rates, the regulation of commercial bank activity, and the macro-monetary models used to predict future economic conditions. Prerequisite: ECON—102. (Same as FINC—212) (ATTR: ARTS or BUS; ISP)

ECON—220. Labor Economics 3 credits

A general survey of the American labor force reveals the changing nature of work, changing labor force participation rates by age and sex, and the growing importance of minority representation. Traditional labor market models of wage determination are supplemented by considerations of institutional constraints, employee benefits, and forms of wage discrimination. Special topics include: types of unemployment, federal manpower programs, and the history of American trade unionism. Prerequisite: ECON—101. (ATTR: ARTS or BUS)

ECON—230. Economic History of the United States 3 credits

The economic development of the United States from early beginnings to present time. A chronological approach is used to study economic aspects of the major problems of each period. (ATTR: AMSB, ARTS or BUS)

ECON—300. Topics in Economics 3 credits

This course will explore a topic not covered in regular offerings. May be taken more than once with specific content. Consult the fall and spring course schedule for specific topics offered. Prerequisite: ECON—101 or ECON—102 (ATTR: ARTS or BUS)

ECON—320. Public Finance 3 credits

Public finance focuses upon the rationale and impact of the government's collection of revenue and its expenditures. Topics to be covered include the budget system, principles of taxation, tax incidence, the principles of expenditures, the impact of spending on private behavior, as well as the ability of the process to produce appropriate decisions. Prerequisite: ECON—101 and ECON—102, ECON—210 or permission of instructor. (Same as FINC—422) (ATTR: ARTS or BUS)

ECON—325. Health Economics 3 credits

Health economics examines the economic forces which shape the delivery of health care services and the public health environment in which we conduct our everyday lives. The course also examines the health impacts and costs of alternative policy choices. Prerequisite: ECON-101. (ATTR: ARTS or BUS)

ECON—330. History of Economic Doctrines 3 credits

A critical examination of the development of the major schools of economic thought from the seventeenth through the early twentieth centuries, with particular attention on mercantilism, classicism, marginalism, socialism, and neo-classicism. This course is primarily a reading program and is restricted to junior and senior level students from all areas of the college. Prerequisite: ECON—101. (ATTR: ARTS or BUS)

ECON 335 - Political Economy 3 credits

Political economy is the study of economic systems, institutions, and outcomes from the perspective of who gains and loses. Conflict over the distribution of these gains and losses, and the use of power to obtain a desired economic outcome will be the focal points of much of our analysis. As such, the methodology used in this course will differ substantially from that used by mainstream economics, which focuses primarily on efficiency and growth and ignores different concepts of economic justice and the role of distribution and power in affecting economic outcomes. To facilitate this approach, this course takes a critical look at American capitalism from contrasting theoretical perspectives, where the interaction of political, social, and cultural forces is brought to bear on economic interactions. This will allow us to develop a broader and more sophisticated perspective on how the American economy actually works, why it doesn't always work, who it works for and against, and why it changes over time. Prerequisites: ECON-101 and ECON-102. (ATTR: ARTS or BUS)

ECON—340. Environmental Economics 3 credits

An examination of how the natural environment is affected by the economic activities of society, and the physical and biological limitations imposed on the economy by the natural environment. Particular areas examined include the use of non-renewable natural resources, market failures, economic methods for analyzing pollution, cost/benefit analysis, the impact of population growth, and the values implicit in free market economies toward the natural environment. (Same as ENVA—300.) Prerequisite: ECON—101. (ATTR: ARTS or BUS)

ECON—350. Comparative Economics 3 credits

A survey of different forms of national capitalist economic organization, e.g. comparisons of the U.S., Germany and Japan with regard to institutional and policy-making differences as they affect the distribution of wealth and income and social welfare. Other topics include comparisons of various socialist economies and formerly socialist economies in Eastern Europe and China, as well as the emerging hybrid forms of economic organization in those societies. Prerequisite: ECON—102 or permission of the instructor. (ATTR: ARTS or BUS; GLST, ISP)

ECON—360. Economic Development 3 credits

An analytical approach to the economic problems of the developing countries. The course includes a discussion of the theories of economic growth and development, including domestic and international issues. This material is augmented by the use of empirical studies of the developmental process. Prerequisite: ECON—101 or ECON—102. (ATTR: ARTS or BUS; GLST, M CCP)

ECON—370. International Trade Theory 3 credits

An examination of bases, advantages and problems of international trade from the perspective of classical, neoclassical and modern theories. Key topics include determinants of the gains from trade, changes in income distribution resulting from trade, the rationale and consequences of commercial policies (e.g. tariffs, quotas and subsidies) and industrial policies designed to enhance the trade competitiveness of trading economies. Emphasis is placed on the consequences of income distribution from trade and, therefore, on questions of equity and efficiency. Prerequisite: ECON—101. (ATTR: ARTS or BUS; GSIB, ISP)

ECON—420. Business Financial Forecasting 3 credits

This course explores the nature and causes of fluctuations in aggregate business activity and the technique used to forecast. To gain an understanding of these techniques, and the usefulness of forecasts, students will prepare a forecast and explore its application to firm decision making. Prerequisite: QBUS—200. (Same as FINC—421) (ATTR: ARTS or BUS)

ECON—430. Econometrics 3 credits

An introduction to the application of statistical techniques to economic problems. This course includes a review of probability theory, mathematical expectation, and theoretical frequency distributions along with considerations of modeling economic phenomena. Ordinary and two-stage least squares regression techniques are utilized for hypothesis testing and economic forecasting. Prerequisites: QBUS—200 or ATDV—110, ECON—101 and ECON—102. (ATTR: ARTS or BUS)

ECON—490. Seminar in Advanced Economic Theory 3 credits

Analysis of selected topics on an advanced level. Topics are drawn from micro and macro-economics. The course is designed to acquaint the student with advanced subjects and original literature. This course may be taken more than once with different content. Prerequisites: ECON—201, 202. (ATTR: ARTS or BUS)

ECON—499. Independent Study 1 - 3 credits

A qualified student may pursue a particular project/topic in the field of Economics in his/her junior or senior year. The project requires the approval of the faculty member involved and the Department Head. A satisfactory written report and/or examination will determine the final grade. Only one independent project may be undertaken in any academic year. Prerequisites: ECON—201, 202 and Junior or Senior status. (ATTR: ARTS or BUS)

ECON—790. Washington Semester Economic Policy. Seminar I 4 credits

The Washington Economic Policy Semester provides a seminar which offers a theoretical analysis of contemporary economic problems; presentation of alternative paradigms used to understand economic problems; extensive readings; preparation of papers; and on-site discussions of economic policy decisions. Meetings are generally four to six times per week and may be held at field sites as well as on campus. (See: ATDV—788, 789) (ATTR: ARTS or BUS)

ECON—791. Washington Semester Economic Policy. Seminar II 4 credits  
This is a correlated course to the work being carried on in ECON—790. (See: ATDV—788, 789)

ECON—792. Washington Semester Business and Trade Seminar I 4 credits (See: ATDV—788, 789)

ECON—793. Washington Semester Business and Trade Seminar II 4 credits (See: ATDV—788, 789)

## Finance Department

Chair: Dr. Thomas J. Kopp, Prof.

Prof.: Dr. Eric C. Girard, Dr. Linda L. Richardson#

Assoc. Prof.: Dr. James P. Murtagh, Dr. Fang (Jenny) Zhao

Asst. Prof.: Mr. A. Melih Küllü, Dr. Richard Proctor,

Dr. Zhenzhen (Tina) Sun

Visiting Instructor: Mr. Anthony G. Pondillo

The Department of Finance is dedicated to teaching our students the nature and practice of financial decision making. The curriculum and methods of instruction are designed to develop the student's ability to identify financial problems, analyze their impact, and design solutions which will withstand critical examination. To accomplish this, we provide our students with the educational framework necessary to become well-rounded, ethical, and innovative thinkers. This prepares students for fulfilling and successful careers in finance and provides the necessary academic foundation for graduate studies.

The curriculum and method of instruction expose students to various financial scenarios. Within this context, they are encouraged to use their analytic and creative skills to develop and present strategies that will withstand critical examination. The School of Business internship program gives students the opportunity to enhance the theoretical knowledge they have gained with practical experience and perspectives.

### Requirements for the Major, B.S. in Finance (30.000 credits):

FINC 215 - Intro to Institutions and Investment	3 cr.
FINC 301 - Managerial Finance I*	3 cr.
FINC 302 - Managerial Finance II	3 cr.
FINC 315 - Adv Investments: Theory and Practice	3 cr.
FINC 413 - International Finance	3 cr.
FINC 418 - Case Problems in Financial Management	3 cr.
Finance Electives	12 cr.

\*Indicates these courses are part of the Common Business Core

Finance electives will be selected after consultation with an academic advisor to determine the best mix of courses to prepare the student for their career and educational goals.

After matriculating, students must take FINC-302, FINC-315, FINC-413 and FINC-418 at Siena.

### Auxiliary (3.000 credits)

ACCT 300 - Intermediate Accounting I	OR	
ACCT 340 - Taxation I		3 cr.

## Description of Courses

FINC—025. Personal Finance 3 credits

Personal Finance is a course for non-business majors, which prepares them to confront the critical financial decisions they will face during their lifetimes. It will provide students with the knowledge to analyze how decisions concerning topics such as money management, tax planning, consumer credit, home financing, insurance, and financial planning, will impact their personal financial goals. In addition, this course also focuses on raising awareness of the adverse impacts personal financial decisions can have on others in society. Topics featured include: environmentally-friendly investments, socially responsible mutual funds, the role of charitable giving and taxes. There is no prerequisite. Open to all non-business majors. (ATTR: BUS, CFJ)

FINC—090. Introductory Topics in Finance 1-3 credits

This course will be taught with varying subject content in the field of Finance at an introductory level with no prerequisites. The particular content will be indicated by subtitle. This course is not intended for students

within the School of Business and may not be taken for credit by students enrolled in a major offered by the School of Business. School of Arts and School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR:BUS)

**FINC—212. Money and Banking 3 credits**

This course is designed to develop the student's understanding of the structure and function of our banking system and the role of monetary policy in determining economic activity. Topics included are: the nature of money, the term structure of interest rates, the regulation of commercial bank activity, and the macro-monetary models used to predict future economic conditions. Prerequisite: ECON—102. (Same as ECON—210.) (ATTR: BUS, ISP)

**FINC—215. Introduction to Institutions and Investments 3 credits**

A survey course designed to help students recognize the interrelationship between human behavior and firm performance in the valuation of stocks and bonds. The central theme of this course will be how and why forces in the economy (both behavioral and economic) lead to the establishment of stock prices. Through projects and simulations, students will explore the interrelationships between financial institutions, financial policies and stock market valuations. Prerequisites: ECON—101, ECON—102; ACCT—200 (may be taken concurrently). (ATTR: BUS)

**FINC—290. Intermediate Topics in Finance 1-3 credits**

This course will be taught with varying subject content in the field of Finance at an intermediate level. Prerequisite course may be required. The particular content will be indicated by subtitle. It may be taken more for credit multiple times for different topics. (ATTR:BUS)

**FINC—301. Managerial Finance I 3 credits**

An introduction to the principles of financial management. This course emphasizes an understanding of the role of finance within the firm. Topics covered include the elements of financial planning, valuation, cost of capital, and capital budgeting under conditions of certainty and risk. Prerequisites: ECON—101, ECON—102, and QBUS—100 or MATH-110, ACCT—205 (may be taken concurrently), or permission. (ATTR: BUS, ISP)

**FINC—302. Managerial Finance II 3 credits**

This course is a continuation of Managerial Finance I. Topics covered include working capital management, the use of long-term financing and leverage. It will also deal with the special topics of mergers or international finance. Prerequisites: ACCT—205, FINC—301. (ATTR: BUS, ISP)

**FINC—315. Advanced Investments: Theory and Practice 3 credits**

Through focusing on the development of the Markowitz Procedure, Capital Asset Pricing Model, Arbitrage Pricing and other theories, this course seeks to familiarize students with the theory underlying the practice of Finance. In addition, this course will also familiarize students with the inherent problems associated with these models as well as their strengths. Prerequisites: FINC—215, FINC—301, QBUS—200. (ATTR: BUS)

**FINC—340. Insurance and Risk Management 3 credits**

A study of the potential economic loss from personal, property and liability risks to which all individuals and organizations are exposed. The methods by which these risks are identified and evaluated will be explored, together with methods for retaining and transferring these risks. Prerequisites: FINC—301 or permission of instructor. (ATTR: BUS)

**FINC—341. Life and Health Insurance 3 credits**

Modern approaches to its various uses, including investment aspects of life insurance, types of contracts, the beneficiary clause and settlement options. Includes analysis of the life and health insurance contracts, types and organization of companies, investment policy, underwriting and marketing, and rate-making principles and techniques, including reserves and surrender values. Prerequisites: FINC—301, FINC—340. (ATTR: BUS)

**FINC—345. Estate Planning 3 credits**

An introduction to and examination of estate planning. Wills, trusts, estates, gift taxes and responsibilities of estate administrators will be analyzed. Prerequisite: FINC—301. (ATTR: BUS)

**FINC—353. Real Estate Finance and Investment 3 credits**

The objective of this course is to familiarize the student with the methods, trends, and policies involved in financing real estate transactions, as well as with the investment features of real estate. It includes topics such as the legal aspects of financing, permanent and construction lending, alternative sources of financing real

property, investment analysis, yield on investment, and real estate and income taxes. Prerequisites: FINC-301. (ATTR: BUS)

**FINC—413. International Finance 3 credits**

By expanding the student's understanding of the financial system to include an international perspective, this course introduces the student to the role of international considerations within the development of corporate policy. The course examines the determination of exchange rates and operation of exchange markets. The application of these ideas will be extended to the firm's management of foreign exchange exposure, cash management, and capital budgeting. Multinational banking and political risk management will also be studied. Prerequisites: FINC—212 or FINC—215 and FINC—301. (ATTR: BUS, GLST, ISP)

**FINC—418. Case Problems in Financial Management 3 credits**

This course consists of selected case studies to be presented in class by student teams. The objective is to encourage the students to develop the ability to identify problems, and through applying the tools of finance, evaluate alternatives and arrive at viable solutions to the problems in each case. Prerequisites: ACCT—300 or ACCT—340 (may be taken concurrently), FINC—302, QBUS—200. Open to senior School of Business students only. (ATTR: BUS)

**FINC—421. Business Financial Forecasting 3 credits**

This course explores the nature of fluctuations in aggregate business activity and the technique used to forecast. To gain an understanding of these techniques, and the usefulness of forecasts, students will prepare forecasts and explore their application to firm decision making. (Same as ECON—420.) Prerequisite: QBUS—200. (ATTR: BUS)

**FINC—422. Public Finance 3 credits**

Public finance focuses upon the rationale and impact of the government's collection of revenue and its expenditures. Topics to be covered include the budget system, principles of taxation, tax incidence, the principles of expenditures, the impact of spending on private behavior, as well as the ability of the process to produce appropriate decisions. (Same as ECON—320.) Prerequisite: FINC—212 or FINC—215 or permission of instructor. (ATTR: BUS)

**FINC—424. Working Capital Management 3 credits**

The theory and practice of financial management as applied to working capital accounts will be examined. The course will focus on corporate cash management, the design of collection and disbursement systems and the management of credit and inventory as it relates to the treasury function. The international dimension will be considered throughout the course. Prerequisites: FINC—212 or FINC—215, and FINC—302. (ATTR: BUS)

**FINC—430. Derivative Securities 3 credits**

A study of options, futures, convertibles, warrants, and other innovative derivatives and swap-like securities. Various trading and hedging strategies, option valuation models, and general market structures will also be covered in this course. This course requires oral and written presentations of computer enhanced research projects. Prerequisite: FINC—315. (ATTR: BUS)

**FINC—431. Securities Analysis 3 credits**

This course is a quantitative approach to security analysis, including the theory of financial statement analysis and valuation of the firm. The course also includes analysis of business and economic conditions, industry analysis, and ratio analysis. An oral and written presentation of computer based research projects is required. Prerequisites: FINC—215, FINC-302, FINC—315. (ATTR: BUS)

**FINC—432. Portfolio Management 3 credits**

Advanced study in the area of investment management with the emphasis on analysis of modern portfolio theories and advanced investment strategies. This course takes a quantitative approach in the decision-making process and requires an oral and written presentation of computer based research projects. Prerequisite: FINC—315. (ATTR: BUS)

**FINC—490. Seminar in Finance 3 credits**

This course will consider a specific topic selected for intensive scrutiny and discussion as a foundation for student research projects, critical analyses, or topical reviews. Consult Fall and Spring schedules for specific topics. May be taken more than once with different contents. Prerequisites: FINC—215, 302, 315, or permission of instructor. (ATTR: BUS)

FINC—499. Independent Study 1 - 3 credits

A student may work independently on a topic of special interest. In a research paper prepared under faculty supervision, the student is expected to demonstrate familiarity with the methods and tools basic to his study. Prerequisite: Permission of the Department Head. Independent study may be taken twice for credit. (ATTR: BUS)

## Management Department

Chair: Ms. Deborah L. Kelly, Esq.

Prof.: Dr. Melinda L. Costello, Dr. Frederick DeCasperis

Dr. Jeffrey A. Mello, Dr. Charles F. Seifert, Dr. Andrea Smith-Hunter

Assoc. Prof: Dr. Erik R. Eddy, Dr. Joanne E. Kapp, Dr. Paul W. Thurston

Professional Specialist: Mr. Kenneth Williams

The Management Department prepares students to manage resources, make informed decisions, and lead with integrity in a global environment. Through real-world, applied learning experiences, students develop critical competencies that integrate the perspectives of their Franciscan and liberal arts coursework. With this foundation they are well prepared to serve their organizations and society. Students pursue graduate education, or careers in the private and public sectors and not-for-profit organizations.

The Management major and minor allows flexibility dependent on each student's interests. For instance, students interested in entrepreneurship, leadership, or human resources could concentrate their course work in one of those areas.

### Requirements for the Major, B.S. in Management (30.000 credits):

MGMT 113- Organizational Communication	3 cr.
MGMT 211- Management Principles*	3 cr.
MGMT 329- Organizational Behavior	3 cr.
MGMT 300- Operations Management*	3 cr.
MGMT 332- Human Resources Management	3 cr.
MGMT 336- Management Research Methods	3 cr.
Electives# (at least 3 cr. of which must be a 400-level course)	12cr.

\*Indicates these courses are part of the Common Business Core.

# selected from BUDV-310, BUDV-410 and the MGMT electives

### Requirements for the Minor, Management (18.00 credits):

MGMT 113 - Organizational Communication	3cr.
MGMT 211 -Management Principles	3cr.
MGMT 329- Organizational Behavior	3cr.
Three electives (Must be selected from any MGMT courses, BUDV-305, BUDV-310 and/or BUDV-410)	9cr.

The Minor in Management is only available to non-business students.

Students interested in exploring the international aspects of the major are urged to consult the section of the catalog which describes the Globalization Studies Minor and the International Studies, Foreign Language and Business Program.

## Description of Courses

MGMT – 090. Introductory Topics in Management 1-3 credits

This course will be taught with varying subject content in the field of Management at an introductory level with no prerequisites. The particular content will be indicated by subtitle. This course is not intended for students within the School of Business and may not be taken for credit by students enrolled in a major offered by the School of Business. School of Arts and School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR:BUS)

MGMT—113. Organizational Communication 3 credits

This is a foundation course that encompasses written, oral, and interpersonal communication skills in formal and informal settings. Fundamental communication theories, principles, and practices are studied from an international business perspective. Applications in business writing, oral presentations, and interpersonal skills

provide students with important communication skills required in today's global environment. (ATTR: BUS, REC)

**MGMT—211. Management Principles 3 credits**

Management Principles provides students with a fundamental understanding of how organizations function and the roles managers play within and across organizations. This course introduces students to six management competencies: decision making and planning, innovation and entrepreneurship, teamwork and leadership, communication, human resource development, and process and project management. The course facilitates the development of the conceptual knowledge and applied skills students will need to manage an increasingly diverse workforce and to lead with integrity in a changing global environment. As a Franciscan Concern/Diversity course, students will learn how effective management practice requires managers to view the world from multiple perspectives, so they may affirm individual rights and appreciate individual differences and differences among groups of people. (ATTR: BUS, CFD, ISP, REC)

**MGMT – 290. Intermediate Topics in Management 1-3 credits**

This course will be taught with varying subject content in the field of Management at an intermediate level. Prerequisite course may be required. The particular content will be indicated by subtitle. It may be taken more for credit multiple times for different topics. (ATTR:BUS)

**MGMT—300. Operations Management 3 credits**

A study of the principles and the applications used in operations management. The topics covered include operations strategy, managing for quality, forecasting, project management, supply chain management, and inventory management. Prerequisites: QBUS—100, 110 or MATH—110, QBUS—200 or ATDV—110 or MATH—371. (ATTR: BUS)

**\*\*\*MGMT—310. Management Science 3 credits**

A study of the quantitative methods used in Management. The topics covered, both in theory and application, include goal, integer and dynamic programming, inventory control, simulation techniques, transportation and assignment problems, queuing, network models, Markov chains, and Heuristics. Prerequisites: QBUS—100, 110 or MATH—110; QBUS—200 or ATDV—110 or MATH—371. (ATTR: BUS)

**MGMT—327. Government and Business 3 credits**

Problems of business operating in a competitive economic system are confronted with governmental regulation at all levels. Particular attention is paid to federal legislation. Current legislation on consumer protection anti-trust, anti-merger, equal employment, OSHA, and environmental protection is analyzed. Prerequisites: MGMT—211, MRKT—212. (ATTR: BUS)

**MGMT—329. Organizational Behavior 3 credits**

Organizational behavior is an application of the principles of the behavioral sciences to the functions, needs, and role of management. The specific principles that comprise the foundation of organizational behavior have been provided by the theories, methods, and principles of such diverse disciplines as psychology, sociology, industrial engineering, organization theory, and communication systems. Topics covered include: organizational culture, decision making skills, group and intergroup behavior and productivity, nonverbal and interpersonal communication skills, participatory management, organization development (OD) and change, stresses in managerial work life, quality of work life, improving subordinate performance, and developing effective organizations. Prerequisites: MGMT—211. (ATTR: BUS, MGMT)

**MGMT—332. Human Resource Management 3 credits**

An interdisciplinary investigation and analysis of theories, principles, and practices of human resources management. The contents encompass: viewing organizations and human resources as inter-related systems; a review of human resources functions and programs; staffing the organization and its various components; human resources training and development; the role and impact of the work environment on employees, management, and the organization; the development and role of employee relations; and kinds and importance of remuneration and security programs. Prerequisite: MGMT—211. (ATTR: BUS, MGMT)

**MGMT-334. International Management 3 credits**

The student is introduced to the functions of management in international firms and issues related to adapting managerial practice to "local" environments. The course focuses upon the globalization of markets, technologies and business practices and how organizational leaders and managers deal with these changing forces. Topics include managerial planning, communication, leadership, motivation, human resource management and organizational behavior in an international context. Prerequisite: MGMT-211 (ATT: BUS, GLST, MGMT, MULT)

**MGMT—336. Management Research Methods 3 credits**

This course provides students the opportunity to learn the objective process of collecting and analyzing data to aid managerial decision making. Students develop and practice the knowledge and skills necessary to review, apply and conduct organizational research. Major topics include the scientific method, sampling, secondary data gathering, observation and interviews, survey construction and experimental design. Students engage in research projects, conduct and interpret statistical analysis, and communicate their findings. Emphasis will be placed on conducting and using research in an ethical manner. Prerequisites: MGMT —113, —MGMT-211, QBUS—200. (ATTR: BUS)

**MGMT—337. Managing Diversity in Organizations 3 credits**

An advanced management course that addresses the various perspectives on the increased diversity of the population in today's organizations. The course primarily focuses on issues of race, gender and ethnicity in organizations. However, other factors that contribute to a diverse organizational population such as disability, age discrimination, class and sexual orientation are also analyzed. The course uses a wide variety of techniques to address diversity in organizations, relating these issues to current demographic trends, the global marketplace and geoethnic transformations. This course is open to students with Junior standing or above. (ATTR: BUS)

**MGMT—338. Labor Relations 3 credits**

A broad treatment of labor-management relations in both the private and public sectors. The course will encompass: the historical development of the labor movement; modern society and industrial relations; management philosophy regarding employee relations and organized labor; labor legislation and its social, economic, and political impact; collective bargaining, its scope and process; contract administration principles and practices; and labor relations issues and trends. Major emphasis will be placed on: the How-to and Experiential activities via projects, case studies, professional and practitioner speakers, and so forth. Prerequisite: MGMT—211. (ATTR: BUS, CFJ)

**MGMT—425. Leading Organizational Change 3 credits**

An advanced management course designed to provide students with in-depth knowledge of the fundamentals of organizational development and change. Emphasis will be on understanding change, how change impacts both individuals and organizations, how best to “manage” the change process, and the primary individual, group, and organizational level interventions commonly used in organizations to enhance performance. Prerequisite: MGMT—329 and MGMT - 336. (ATTR: BUS,)

**\*\*\*MGMT—437. Applied Research Methods 3 credits**

Research is increasingly utilized by managers. Students will benefit from a better understanding of exactly how research is conducted by participating in a genuine, professional research project. This project focuses on defining the problem, designing the appropriate methods and strategies for gathering data, analyzing and interpreting the data, and reporting the findings to the particular client. Practical knowledge of a statistical software package is an integral part of the course. Prerequisites: MGMT—336; QBUS—200; CSIS—010 or equivalent. (ATTR: BUS)

**MGMT—439. Leadership 3 credits**

An advanced management course aimed at providing students with in-depth knowledge on the various leadership theories and insight into effective leadership practices. A critical examination of leadership theories and research will be undertaken. Areas of leadership covered include; management versus leadership, trait theories of leadership, behavior theories of leadership, participative leadership and delegation, power and influence, situational leadership, and “modern” theories of leadership. Emphasis will also be placed on providing an opportunity to apply the theories in practical business applications. Prerequisites: MGMT—211 or permission of instructor. (ATTR: BUS, MGMT)

**\*\*\*MGMT—440. Performance Appraisal, Work Behavior and Motivation 3 credits**

An upper level course which gives students the opportunity for theoretical analysis and practical application in understanding the relationship between respect for people, performance dimensions, motivation and work behavior. This will be accomplished by studying theories of workplace motivation, methods of performance appraisals, and assessing human behavior at work. The course will review current research, methodologies, and uses of performance appraisal; goal setting theories; determinants of goal commitment; and, the motivation-performance relationship. Prerequisite: MGMT—332. (ATTR: BUS)

MGMT—490. Seminar: Topics in Management 3 credits

This course is intended to provide opportunities for concentrated study at an advanced level in areas beyond the scope of regular course offerings including topics of current concern and topics specifically identified as meeting specialized interests of students. This course is offered on an irregular basis. It may be taken more than once with different course content. Prerequisite: There are no specific prerequisites. The seminar is an elective, open to seniors in Management. Depending on the topic, it might also be cross-listed with other Departments and/or open to seniors in other majors. In all cases, approval of the Instructor is required. (ATTR: BUS)

MGMT—499. Independent Study 1 - 3 credits

A qualified student, with the consent of the Head of the Management Department, the Dean of the School of Business, and a participating faculty member of the department, may pursue further research and study on a particular topic in Management. The student will be directed by the participating faculty member. The number of credits to be awarded (1 to 3) will be submitted to the department head for approval by the participating faculty member. The student will meet with the faculty member for periodic discussion. The student will also submit a satisfactory written report to the faculty member concerned. The student will be expected to comply with all School of Business guidelines concerning such projects. Independent study may be taken twice for credit. (ATTR: BUS)

\*\*\* Offered when there is sufficient student interest.

## Marketing Department

Chair: Dr. Raj Devasagayam, Prof.

Prof.: Dr. Cheryl L. Buff, Mr. Joseph L. Rosetti

Assoc. Prof: Mr. Gilbert M. Brookins, Dr. Phuong Chinh (Adam) Nguyen

Asst. Prof.: Dr. Michael S. Pepe, Ms. Jie Sun

Marketing is concerned with determining, creating, communicating, and delivering a value proposition that meets the needs of an organization's customers. Siena's Marketing curriculum provides students with the knowledge and skills necessary to identify marketing opportunities and develop appropriate marketing strategies to profitably pursue those opportunities while remaining responsive and accountable to all stakeholders in the marketplace. Courses expose students to major concepts, skills, and tools that educate students for the theory and practice of modern marketing as well as undergird student preparation for graduate programs in business.

Marketing majors receive cutting edge marketing education from a faculty committed to learning centered pedagogy with a mix of lectures, readings, discussions, case studies, and computer simulations. This mix of teaching methods assures a healthy respect for learning styles of contemporary students without compromising on a balance between the theory and practice of marketing. Courses provide opportunities for students and teachers to interact closely in applying knowledge and skills in solving theoretical problems and application of theory to real-world problems. Students acquire knowledge, clarify attitudes and values, and develop communication, interpersonal, and analytic skills that lead to critical thinking and complex reasoning in making enlightened decisions.

The Marketing major is appropriate for students planning careers in marketing and allied areas. This major is particularly suited for careers in industries such as packaged goods, services, sports marketing, international marketing, e-commerce, business marketing, advertising, public relations, consulting, retailing, sales and relationship management, and marketing research.

### Requirements for the Major, B.S. in Marketing (30.000 credits):

MGMT 211 - Management Principles*	3 cr.
MRKT 212 - Marketing*	3 cr.
MRKT 324 - Consumer Behavior	3 cr.
MRKT 334 - International Marketing	3 cr.
MRKT 336 - Marketing Research Methods	3 cr.
MRKT 435 - Marketing Management	3 cr.
MRKT Electives	9 cr.
BUDV 450 - Organizational Strategy*	3 cr.

\*Indicates these courses are part of the Common Business Core

Students can only enroll in MRKT courses if they have achieved a minimum grade of C- in prerequisite courses.

Students interested in exploring the international aspects of the major are urged to consult the section of the catalog which describes the Globalization Studies Minor and the International Studies, Foreign Language and Business Program.

### **Description of Courses**

**MRKT—090. Introductory Topics in Marketing 1-3 credits**

This course will be taught with varying subject content in the field of Marketing at an introductory level with no prerequisites. The particular content will be indicated by subtitle. This course is not intended for students within the School of Business and may not be taken for credit by students enrolled in a major offered by the School of Business. School of Arts and School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR:BUS)

**MRKT—212. Marketing 3 credits**

A foundation course that introduces the student to an understanding of both the consumer and business marketplaces. The strategies necessary to market goods and services in a domestic and global environment are discussed from the perspective of a variety of organizational structures. This is accomplished through an analysis of external and internal factors that impact the organization, and through the development of an understanding of the strategy components collectively referred to as the marketing mix. (ATTR: BUS, ISP, REC)

**MRKT—290. Intermediate Topics in Marketing 1-3 credits**

This course will be taught with varying subject content in the field of Marketing at an intermediate level. Prerequisite course may be required. The particular content will be indicated by subtitle. It may be taken more for credit multiple times for different topics. (ATTR:BUS)

**MRKT—321. Distribution Management 3 credits**

Distribution management is a phrase that denotes a total systems approach to the management of the distribution process, including all of those activities involved in the logistics of physically moving inventory from point of origin to point of use or consumption. Areas covered include customer service, transportation, warehousing, inventory management, order processing and information systems, materials management, evaluation of effectiveness and control of performance, physical distribution organization, international distribution, strategic planning and distribution system design. Prerequisites: MRKT—212, QBUS—200. (ATTR: BUS)

**MRKT—323. Retailing 3 credits**

A systematic and comprehensive coverage of the elements necessary for successful retail store management. These elements include types of retail institutions, and merchandise management: planning and control, pricing, purchasing, location, layout, display, promotion, store organization, and staffing. Prerequisite: MRKT—212. (ATTR: BUS)

**MRKT—324. Consumer Behavior 3 credits**

An advanced marketing course designed to provide students with in-depth knowledge of the fundamentals of consumer behavior, with emphasis on the consumer in the marketplace, consumers as individuals, consumers as decision makers, and consumers as influenced by culture and subculture. A critical examination of consumer behavior theories and research will be undertaken. Further emphasis will be placed on understanding the application of consumer behavior concepts in a competitive, dynamic, and global business environment. Prerequisites: MRKT—212 or permission of the instructor. (ATTR: BUS, MRKT)

**MRKT—325. Advertising 3 credits**

Advertising's role in the marketing mix is related to local, regional, and national sales efforts. Selection of media including television, radio, newspapers, magazines, outdoor, direct mail, as well as specialized local media is covered. Students create television storyboards, radio commercials, and print-media copy and layout. Elements of advertising campaigns are explored through student advertising agencies established to handle real-world advertising assignments. Course includes budgeting, advertising effectiveness studies, sales promotion, and public relations. Prerequisite: MRKT—212. (ATTR: BUS)

**MRKT—326. Sales Management 3 credits**

This course aims to accomplish four main objectives: [1] To delineate the areas in which sales executives make decisions; [2] To analyze and evaluate sales management decision making criteria and processes; [3] To engage students in a presentation designed to relate the text materials to sales management situations; [4] In addition to the above, students will be introduced to an overview of basic principles of selling. Prerequisite: MRKT—212. (ATTR: BUS)

**MRKT—327. E-Marketing 3 credits**

This course will examine the evolution of electronic commerce from a global strategic marketing perspective. Specific emphasis will be placed on the investigation of a complex general purpose technology framework in the context of the unique characteristics of both business to consumer and business to business markets. The corresponding impacts on the elements of the marketing mix will be examined through an application and analysis of the specific electronic marketing activities which have emerged from the technologies of digitization, networking and individualization. Prerequisite: MRKT - 212. (ATTR: BUS)

**MRKT—328. Sports Marketing 3 credits**

This course will examine the complex and diverse nature of sports marketing from a strategic marketing perspective. Specific emphasis will be placed on the contingency framework for strategic sports marketing, with attention to market selection, marketing mix decisions, and the implementation and control of the strategic sports marketing process. Additionally the course will examine marketing through sports; using sports as a platform for developing strategies and tactics to sell nonsports products. Prerequisite: MRKT—212. (ATTR: BUS MRKT)

**MRKT—329. Pricing Strategy and Marketing Analytics 3 credits**

An advanced marketing course designed to focus on the practical needs of the marketing manager when making marketing decisions regarding price and quantitative analysis of data. The course will encompass two major components: (1) A comprehensive and practical focus to pricing analysis and strategy development to manage markets strategically in order to improve the competitiveness and profitability of offers for organizations. (2) A focus on developing and utilizing quantitative marketing decision models to plan, implement, and analyze marketing strategies and tactics. Students will learn how to analyze data when making strategic and tactical marketing decisions, skills that are increasing in demand in corporations and nonprofit organizations today. Prerequisites MRKT-212 and QBUS-200. (ATTR: BUS)

**MRKT—330. Business to Business Marketing and Purchasing 3 credits**

This course focuses on the development of marketing strategies targeted at organizations, including businesses, institutions, not-for-profit organizations, and governmental agencies. The focus will be on identifying the unique differences between organizational and consumer buying behavior, with an assessment of the impact on strategy decisions. The course will also address principles, techniques, and strategies that are utilized by purchasing and materials management professionals in the organization procurement process. Prerequisite: MRKT—212. (ATTR: BUS, MRKT)

**MRKT—332. New Product Development and Brand Management 3 credits**

This course focuses on marketing entrepreneurship and innovation of new product development and brand management throughout the product life cycle. The first part of the course studies the new product/service development and testing to market introduction for new or established organizations. Attention is devoted to creating an environment conducive to innovation, reorganizing business opportunities, and assessing the market, customer, and competitive situations throughout the product life cycle. The second aspect of the course relates to branding and brand management, including the tasks of positioning, brand personality and equity, and alternate branding strategies. The course facilitates the development of the conceptual knowledge and applied skills students will need in order to meet the needs of a diverse global market across all socio- economic groups. Prerequisites: MRKT 212. (ATTR: BUS)

**MRKT—334. International Marketing 3 credits**

The student is introduced to a systematic treatment of global marketing. The emphasis is on the problems and opportunities available to exporters of U.S. products and services, as well as organizations with multinational or global operations. Attention is devoted to cultural, social, and economic factors that affect marketing on a global scale. Suggested for students enrolled in International Studies, Foreign Languages and Business Program. Prerequisites: MRKT—212, ECON—101. (ATTR: BUS, GLST, MCCP, MRKT, MULT)

**MRKT—336. Marketing Research Methods 3 credits**

Research is the objective process of collecting and analyzing data in order to aid in the marketing and managerial decision making process. Major topics include survey and sampling methodologies, questionnaire construction, observation and experimental methodology, plus secondary data gathering. Students engage in research projects, and interpret statistical analysis of output from a computer statistical package. Prerequisites: MRKT—212, QBUS—200. (ATTR: BUS)

MRKT—435. Marketing Management 3 credits

An advanced marketing course which utilizes a universal, analytical approach to solving marketing problems at the executive marketing and managerial level. The course draws heavily from materials found in marketing principles, economics, mathematics, and the behavioral sciences, presented to the student in a textual format. Each student will participate in the analysis of case studies to gain experience and skill in the strategy decision-making process. Prerequisites: MRKT—212, MRKT—324, MRKT—336, and QBUS—200. (ATTR: BUS, MRKT)

\*\*\*MRKT—437. Applied Research Methods 3 credits

Research is increasingly utilized by managers. Students will benefit from a better understanding of exactly how research is conducted by participating in a genuine, professional research project. This project focuses on defining the problem, designing the appropriate methods and strategies for gathering data, analyzing and interpreting the data, and reporting the findings to the particular client. Practical knowledge of a statistical software package is an integral part of the course. Prerequisites: MRKT—336; QBUS—200; CSIS—010 or equivalent. (ATTR: BUS)

MRKT—490. Seminar: Topics in Marketing 3 credits

This course is intended to provide opportunities for concentrated study at an advanced level in areas beyond the scope of regular course offerings including topics of current concern and topics specifically identified as meeting specialized interests of students. This course is offered on an irregular basis. It may be taken more than once with different course content. Prerequisite: There are no specific prerequisites. The seminar is an elective, open to seniors in Marketing. Depending on the topic, it might also be cross-listed with other Departments and/or open to seniors in other majors. In all cases, approval of the Instructor is required. (ATTR: BUS)

MRKT—499. Independent Study 1 - 3 credits

A qualified student, with the consent of the Head of the Marketing Department, the Dean of the School of Business, and a participating faculty member of the department, may pursue further research and study on a particular topic in Marketing. The student will be directed by the participating faculty member. The number of credits to be awarded (1 to 3) will be submitted to the department head for approval by the participating faculty member. The student will meet with the faculty member for periodic discussion. The student will also submit a satisfactory written report to the faculty member concerned. The student will be expected to comply with all School of Business guidelines concerning such projects. Independent study may be taken twice for credit. (ATTR: BUS)

\*\*\* Offered when there is sufficient student interest.

## Quantitative Business Analysis Department

Chair: Dr. John C. O'Neill, Assoc. Prof.

Prof.: Dr. Gary W. Clendenen, Dr. Douglas A. Lonnstrom, Dr. James R. Nolan

Assoc. Prof.: Mr. Gary B. Franko, Ms. Carol P. Venezia

Asst. Prof.: Dr. James P. Burnes, Dr. Joseph P. McCollum, Dr. Manimoy Paul

Visiting Asst. Prof.: Dr. William Adamczak, Dr. Scott Bianco

This department provides students with the analytical tools necessary for making better management decisions. In order to appraise and evaluate quantitative information, every student is introduced to several mathematical techniques that can be applied to business situations. This is followed by a comprehensive treatment of analytical processes for decision making. These introductory courses in applied mathematics cover the techniques of problem formulation and solution.

Subsequent courses emphasize the application of additional mathematical concepts and analyses useful for decision making in businesses, government agencies, and other organizations. A broad range of analytical skills are covered by these additional courses.

## Description of Courses

QBUS—090. Introductory Topics in Quantitative Business 1-3 credits

This course will be taught with varying subject content in the field of Quantitative Business at an introductory level with no prerequisites. The particular content will be indicated by subtitle. This course is not intended for students within the School of Business and may not be taken for credit by students enrolled in a major offered by the School of Business. School of Arts and School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR:BUS)

QBUS—100. Mathematics for Decision Making I 3 credits

Mathematical techniques applied to business situations. The topics include mathematics of finance, linear equations and functions, graphs of functions, systems of linear equations, inequalities, linear programming, and non-linear models. This course should be the first course taken in quantitative business. A graphics calculator is required; the TI-83 or TI-84 calculator is recommended. Prerequisites: none. (ATTR: ARTS, CAQ, CDQ)

QBUS—110. Mathematics for Decision Making II) 3 credits

This course completes the coverage of mathematical techniques for business situations, introducing additional mathematical techniques including applied calculus. The topics covered include nonlinear models, derivatives, graphing and optimization with derivatives, and integration. A graphics calculator is required; the TI-83 or TI-84 calculator is recommended. Prerequisite: QBUS—100. (ATTR: ARTS, CAQ)

QBUS—200. Business Statistics I 4 credits

An introductory course in business statistics covering the topics of descriptive statistics, discrete probability distributions, the normal distribution, sampling distributions, estimation, hypothesis testing, statistical quality control, simple linear regression and correlation. A statistical software package is used. Prerequisites: QBUS—110 or MATH—110, demonstrated facility with computerized spreadsheet applications (completion of CSIS—010 or CSIS—011 or successful completion of a Computer Science exam demonstrating competence with computerized spreadsheets). Not open to students who have taken ATDV—110. Counts as a liberal arts and science course for students entering Fall 2011 or later. (ATTR: ARTS, CFN)

\*\*\*QBUS—210. Business Statistics II 3 credits

A study of applied statistical methodology. Topics from among the following will be covered: experimental design and analysis of variance, multiple regression, nonparametric statistical methods, Bayesian decision making, time series, discriminant analysis and autoregressive modeling. Prerequisite: QBUS—200 or permission of instructor. (ATTR: BUS)

QBUS - 290. Intermediate Topics in Quantitative Business 1-3 credits

This course will be taught with varying subject content in the field of Quantitative Business at an intermediate level. Prerequisite course may be required. The particular content will be indicated by subtitle. It may be taken more for credit multiple times for different topics. (ATTR:BUS)

QBUS—480. Mathematics of Finance 3 credits

This course builds on the knowledge base contained in previous courses taken by actuarial students. The goal is to reinforce understanding of the fundamental concepts of financial mathematics, and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use. Students will review basic financial instruments and expand their knowledge base to more modern financial analysis using yield curves, spot rates and immunization. Finally students will be introduced to the concept of risk management and understand how principles such as derivatives, forwards, futures, short and long positions, call and put options, spreads, collars, hedging, arbitrage, and swaps affect a firm's risk. (Same as MATH—480). Prerequisite: FINC—301, FINC—315 and MATH—120, or permission of instructor. (ATTR: ARTS, BUS, MHUL)

QBUS—495. Independent Study 1 - 3 credits

A qualified student may pursue a particular topic/project in the field of Quantitative Business Analysis in his/her junior or senior year. The project requires the approval of the faculty member involved, the Department Head and the School of Business Dean. The number of credits to be awarded (1 to 3) will be determined by the Department Head. A satisfactory written report will determine the final grade. Independent Study may be taken twice for credit. Prerequisites: QBUS—100, 110 or MATH—110, 120; QBUS—200 or ATDV—110, or MATH—270; and one course from QBUS—210, MGMT—300 or MGMT—310; junior or senior status; permission of Department Head and School of Business Dean. (ATTR: BUS)

# School of Science

Dr. Allan T. Weatherwax, Dean  
Dr. Jean Mangun, Associate Dean  
Ms. Laurie Fay, Assistant Dean for Administration  
Ms. Angela L. McKeever, Assistant Dean

## School of Science Courses

SCDV—001. Topics in Science 0-3 credits

This course will be taught with varying subject content. It deals with topics that cross normal departmental boundaries. The particular content will be indicated by subtitle. School of Science students may take this course for elective credit only. It may be taken more than once with different content. (ATTR: ARTS)

\*\*\*SCDV—002. Women in Science: Struggles and Strategies 3 credits

The lives and work of women scientists in the fields of physics, astronomy, chemistry, mathematics, and biology will be examined. Both biographies and scientific studies will be utilized to study the ways in which gender has affected career choices, education, patterns of scientific work, and the recognition of achievement. The course will emphasize discussion of assigned readings as well as research and writing. Prerequisite: Junior standing. This course does not satisfy the mathematics/science core requirement. (ATTR: ARTS)

SCDV—010. Discovery Science 3 credits

An interdisciplinary course in the sciences, taught through lecture and laboratory, with the emphasis on learning by discovery. Topics covered include the nature of energy and matter, processes of change in the universe, and the evolution of life. No Prerequisites. Lab Fee. (ATTR: ARTS)

SCDV—100. In the Realm of the Physical Sciences 3 credits

An intensive exploration of some of the fundamental laws of the universe and their application to various systems. Topics will be selected from major paradigm shifts such as the Copernican revolution and the development of quantum mechanics as well as ideas from areas such as relativity, cosmology, the origin of life, plate tectonics/seismology, dating techniques in archaeology, and the circulation of the atmosphere. PHYS—100 satisfies the Natural World core requirement. Requires permission of the Honors Program Director. (ATTR: ARTS, CAN, HNRS)

SCDV—210. Human Anatomy and Physiology I (3 hours lecture, 3 hours laboratory) 4 credits

Lecture and accompanying lab focused on the structure and function of the human body. Emphasis will be on organization of the human body, musculo-skeletal, and nervous systems. Designed for Allied Health students. Biology majors may not use this course to fulfill requirements for the Biology major or minor. Prerequisite: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS)

SCDV—211. Human Anatomy and Physiology II (3 hours lecture, 3 hours laboratory) 4 credits

Lecture and accompanying lab focused on the structure and function of the human body. Emphasis will be on metabolism, homeostasis, reproduction, and major organ systems. Designed for Allied Health students. Biology majors may not use this course to fulfill requirements for the Biology major or minor. Prerequisite SCDV—210. Lab fee. (ATTR: ARTS)

SCDV—230. Electronics (3 hours lecture, and 3 hours laboratory) 4 credits

An introduction to analog and digital electronics. Diode, transistor, and operational amplifier circuits. Combinational and sequential logic, state machine design. Three hours of lecture and four hours of laboratory a week for one semester. Prerequisite: PHYS—120 or 140. Lab fee.

SCDV—250. Practicum for Emerging Scientists 1 to 3 credits

Field study for science students in the early stages of their academic careers. The primary objective is to develop in the student an awareness of how classroom concepts are converted into applications of value in today's society through participation in ongoing applied or basic research or development programs in a business or industry. The students will work in an area covered by the department of Biology, Chemistry and Biochemistry, Computer Science, Mathematics, Environmental Studies, or Physics and will be supervised by a professional in the field. Students will be required to keep a log of their activities, and prepare a summary report and presentation of their experience at the end of the semester. No student may apply more than 6 credits of SCDV - 250 credit towards their degree, and no more than 3 credits of SCDV -250 may be taken in a semester. This course is offered on a pass/fail grading system only. Prerequisites: Prior to taking this course, students must

have completed at least 15 credits at Siena, have sophomore standing, completed a two semester science course sequence in the field experience subject area and earned a grade of B or higher in both courses, have an overall GPA of 3.0 or higher, a recommendation from a Siena faculty member in the field experience department, and permission of the School of Science Intern Coordinator. (ATTR:ARTS)

**SCDV—400. Advanced Topics in Science 1-3 credits**

This course will explore advanced science topics, often interdisciplinary in nature not covered in regular course offerings. Topics are selected on the basis of faculty and student interests. Pre-requisites depend on the topics being offered and course registration requires permission of the instructor. This course may be taken more than once with different topics. (ATTR: ARTS)

**SCDV—480. Internship in Science 1 - 3 credits Field Study, 45-135 hours**

Field study in subject areas covered by the departments of Biology, Chemistry, Computer Science, Mathematics, or Physics. The primary objective is to develop in the student an awareness of how theoretical concepts are converted into applications of value in today's society through participation in ongoing applied or basic research or development programs in the facilities of business, industry, and government. Students will work approximately 6 hours per week for 1 credit, 9 hours per week for 2 credits, or 12 hours per week for 3 credits. The time may be spent on a single project or on a variety of tasks agreed upon by the School of Science Intern Coordinator and the supervisor. Students will be required to keep a log of their activities and to prepare a summary report of their experience at the end of the semester. At the request of the host institution and the discretion of the Intern Coordinator, a student may extend the internship until a total of six credits has been earned. No students may apply more than 6 credits of internship experience in any combination of fields towards their degree (except for international internships). May be taken on a pass/fail grading system only, but does not count against the one elective pass/fail option per semester. Offered during the summer and academic year. Prerequisites: Junior standing, 14 or more credits in a single department in the School of Science (Internship must be in a subject covered by this department), and permission of the School of Science Intern Coordinator, Dr. Timothy Lederman. (ATTR: ARTS, INT)

**SCDV—499. Independent Study in Science 1 - 3 credits**

This course provides an opportunity for seniors with a 3.0 or above to pursue independent study that is interdisciplinary or that does not fit within a single department's guidelines. The permission of a faculty member and the Dean is required.

## **Biology Department**

Chair: Dr. Kenneth Helm, Assoc. Prof. (Fall), Dr. James Angstadt, Prof. (Spring)

Prof.: Dr. John H. Hayden, Dr. Edward J. LaRow,

Dr. Rachel Sterne-Marr, Dr. Lawrence L. Woolbright, Dr. Andrea Worthington, Dr. Nina Zanetti

Assoc. Prof.: Dr. Amy Springer, Dr. Lise D. Wilson

Asst. Prof.: Dr. Sarah Berke, Dr. Gregory T. Byrnes, Dr. Christopher W. Harbison, Dr. D. Adam Mason

Visiting Asst. Prof.: Dr. Linda Auker, Dr. Seema Chaturvedi, Dr. Stephanie Vernooy

Lecturer: Dr. Bridgit Goldman, Mr. George Rapp

The Biology Department develops in each student an appreciation for contemporary issues in biology and an understanding of the principles governing life through a laboratory-intensive curriculum taught by faculty dedicated to enriching the learning experience. A variety of courses, coupled with an effective advising system, prepares the Biology major for:

1. Professional studies in the areas of medicine, dentistry, optometry, veterinary medicine, chiropractic and other health-related fields such as physical therapy and physician's assistant. (See section of catalog under "Articulation Agreements and Cooperative Programs")
2. Graduate studies in sub-specialties of Biology including Animal Behavior, Biochemistry, Botany, Cell Biology, Conservation Biology, Developmental Biology, Ecology, Endocrinology, Environmental Biology, Evolution, Forensic Science, Genetics, Immunology, Microbiology, Molecular Biology, Neuroscience and Physiology.
3. Secondary education certification in collaboration with the Education Department.
4. A variety of other careers including public health administration, genetic counseling, bioinformatics and jobs in the pharmaceutical and biotechnology industries.

A major emphasis of our program is to encourage critical thinking and an active engagement in the biological sciences. We do this by keeping class sizes small and including a laboratory experience as an integral component of most courses. Many laboratories incorporate an independent project where students build on the

concepts and techniques they have learned by designing and carrying out an experiment of their choice. Some examples of recent projects include studies of cartilage and bone formation in chick embryos, diversity of fish species in local streams, hormonal modulation of neuronal impulses, host plant selection by a tropical shieldbug, and purification of wheat germ acid phosphatase.

Students in our morphology, physiology, and cell/molecular oriented courses obtain hands-on experience with the most modern techniques and equipment in biology, including: high quality stereo-dissecting; compound, phase and fluorescence microscopes; electrophoretic equipment and computer software for DNA/RNA analysis; PCR thermocyclers; an electroporator for gene transfer; hybridization ovens for Northern and Southern blotting; UV/visible spectrophotometers; a variety of centrifuges including microfuges and ultracentrifuges; state-of-the-art chromatographic and electrophoretic equipment for protein purification and immunoblotting; micromanipulators, intracellular amplifiers and computer-based data acquisition systems for muscle physiology and neurobiology; a microtome, tissue culture facility and dark room.

Other courses, such as vertebrate biology and general, plant, and tropical ecology, are truly field oriented—most laboratories involve trips that teach students how to make observations and collect data by standard sampling techniques. Further, many of these laboratories introduce students to environmental issues and applied problems. For example, students on a winter field trip to the Connecticut coast conduct a quantitative survey of overwintering ducks and geese. Students learn census procedures and how to think critically about the impacts of environmental pollutants, such as oil spills, and disturbances, such as water boat traffic, on these birds. Due to our proximity to the Adirondacks and other wildlife preserves, field biology studies are enriched by day and weekend trips to these nearby sites. Students also have the opportunity to do extensive study in the tropics.

Our program encourages research experience by offering credit for Independent Research (on-campus) or Science Internship (off-campus) in biology. Each faculty member maintains a research laboratory where students may carry out research with a professor in a one-on-one situation. When classes are not in session, some students accompany their professors to research field stations in Trinidad, and Puerto Rico. Research experience is open to all interested students and is especially effective in helping students to develop an appreciation of their creative and investigative skills. Many students present their findings in our annual student research poster session or Biology Department seminar, and some publish their work in scientific journals and books.

**Requirements for Major, B.S. in Biology (36.000 credits AND 11 courses):**

BIOL 110 - General Biology I	<b>OR</b>	
BIOL 170 - Advanced General Biology		4 cr.
BIOL 120 - General Biology II	<b>OR</b>	4 cr. <b>OR</b>
BIOL 180 - Advanced Gen Biology Seminar		2 cr.
BIOL 190 - Writing/Research Skills for Biology		3 cr.
BIOL 260 - Molecular Genetics		3 <b>OR</b> 4 cr.
1 course from each of the following areas:		
Cellular & Molecular (CEMO)		3 or 4 cr.
Morphology (MORP)		4 cr.
Organismic & Population (ORPO)		3 cr.
Physiology (PHYL)		4 cr.

3 additional Biology Electives 220 level or greater with the exception of Genetics Lab & Biology Seminar. Independent research in Biology (Biol-499) may fulfill up to one of the three additional courses but only if the course is taken for 2 or 3 credits.

Biology majors must earn a C- or better in any biology course listed as a prerequisite for another biology course: non-majors must earn a D- or better. Students who fail to meet this criterion may be removed from the class roster prior to the start of classes. Students will be notified in advance of any such changes.

**Auxiliary (32.000 credits)**

CHEM 110 - General Chemistry I	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
CHEM 220 - Organic Chemistry II	4 cr.

MATH 110 - Calculus I		4 cr.
MATH 120 - Calculus II		4 cr.
PHYS 110 - Gen Physics IA	<b>OR</b>	
PHYS 130 - General Physics I		4 cr.
PHYS 120 - Gen Physics IIA	<b>OR</b>	
PHYS 140 - General Physics II		4 cr.

**Requirements for the Major, B.A. in Biology /Albany Medical Program (33.000 credits):**

BIOL 110 - General Biology I	<b>OR</b>	
BIOL 170 - Advanced General Biology		4 cr.
BIOL 120 - General Biology II	<b>OR</b>	4 cr. <b>OR</b>
BIOL 180 - Advanced Gen Biology Seminar		2 cr.
BIOL 190 - Writing/Researching Skills for Biology		3 cr.
BIOL 220 - Cell Biology		4 cr.
BIOL 260 - Molecular Genetics		3 cr.
BIOL 420 - Biochemistry		4 cr.
BIOL 490 - Biology Seminar		2 cr.

\*Biology Seminar must have medical topic as subject.

1 course from each of the following areas:

Morphology (MORP)		4 cr.
Organismic & Population (ORPO)		3 cr.
Physiology (PHYL)		4 cr.

**Auxiliary (53.000 credits)**

CHEM 110 - General Chemistry 1		4 cr.
CHEM 120 - General Chemistry II		4 cr.
CHEM 210 - Organic Chemistry I		4 cr.
CHEM 220 - Organic Chemistry II		4 cr.
MATH 110 - Calculus I		4 cr.
MATH 120 - Calculus II		4 cr.
PHIL 210 - Ethics		3 cr.
PHYS 110 - General Physics IA		4 cr.
PHYS 120 - General Physics IIA		4 cr.
PSYC 100 - General Psychology		3 cr.
RELG 360 - Morals and Medicine		3 cr.
SWRK 200 - Social Work Practice Skills		3 cr.

Two additional courses in Philosophy, 200 level and above 6 cr.

\*Students take Honors First Year Seminar 101 and 102 and they are required to take two additional honors courses from the School of Liberal Arts offerings

\*Students must successfully complete a minor in one of the programs in the School of Liberal Arts

\*Only students accepted into the Albany Medical Program are eligible for the B.A. in Biology.

**Requirements for the Minor, Biology (18.000 credits):**

BIOL 110 - General Biology I		4 cr.
BIOL 120 - General Biology II		4 cr.
	<b>OR</b>	
BIOL 170 - Advanced General Biology		4 cr.
BIOL 180 - Advanced General Biology Seminar		2 cr.
	<b>OR</b>	
BIOL 130 - General Biology IA for Social Science		4 cr.
BIOL 140 - General Biology IIA for Social Science		4 cr.
Biology Electives		4 courses

BIOL 010, 020, 025 and 040 will not be counted towards the minor.

**Education Certification:** Students seeking admission to the Biology certification sequence should be approved by both the Biology Department and the Education Department no later than the junior year. Requirements for initial approval, as well as admission to the professional semester, will normally include a minimum GPA of 3.0 in biology, 2.75 overall, and demonstration of strong communication skills. Certification students are required to complete all courses required for the major in biology. An additional 28 hours of education courses are taken in consultation with the Education Department. Included in these is Instructional Theory and Practice in Science (EDUC—481) which will be allowed to substitute for one elective course in biology. It is anticipated that returning and continuing students seeking biology certification will have fulfilled all the above requirements (or their equivalents in the case of coursework). Under certain circumstances, applicants with relevant life experience may apply for an individualized program involving updating of background and demonstration of competence with advanced coursework in biology.

**Advanced Placement (AP) Biology:** Students who have a score of 4 or 5 on the AP examination will receive 3 credits in BIOL-040. Those students majoring in biology or earning a minor in biology also have the option of taking the Advanced General Biology course sequence: *Fall Semester:* Advanced General Biology (BIOL—170) 4 credits, *Spring Semester:* Advanced General Biology Seminar (BIOL—180) 2 credits.

**Department Colloquia:** In order to help inform the student about the latest developments in the biological sciences, the department schedules colloquia (non-credit) on several Friday afternoons during the course of the semester. These colloquia feature guest lecturers from other institutions, Siena faculty reporting their research results, and students presenting results of independent research projects. Several sessions are designed to provide information about the career options available to Biology graduates. The attendance of all Biology majors is expected.

### **Description of Courses**

**BIOL—010. Topics in Environmental/Population Biology (3 hours lecture) 3 credits**

This course will be offered with emphasis on different topics. The content will be designated by subtitle. Students may take this course more than once with different content. Not open to Biology majors. This course is designed to fulfill part of the School of Science Core requirement for School of Liberal Arts and School of Business students. (ATTR: ARTS, CAN) Examples of special topics include:

#### **Principles of Evolution**

Major evolutionary principles will be analyzed to develop an understanding of human origins. Topics covered include: The history of evolutionary theory, genetic basis of evolution, ecological basis of evolution, and current evolutionary theory. (ATTR: ARTS, CAN)

#### **Animal Behavior**

An evolutionary approach to the study of animal behavior. Topics include an introduction to genetics and evolution, the evolution of behavior, social behavior, reproductive and parental behavior, and competition. (ATTR: ARTS, CAN)

**BIOL—020. Topics in Human Biology (3 hours lecture) 3 credits**

This course will be offered with emphasis on different topics. The content will be designated by a subtitle. Students may take this course more than once with different content. Not open to Biology majors. This course is designed to fulfill part of the School of Science Core requirement for School of Liberal Arts and School of Business students. (ATTR: ARTS, CAN) Examples of special topics include:

#### **Nutrition**

This course is designed to help students evaluate their eating habits based on quantity and distribution of nutrients. Topics will include the chemical nature and biological function of the six classes of nutrients: carbohydrates, lipids, proteins, vitamins, minerals, and water. Additionally, current nutritional ideas on health and disease will be examined. (ATTR: ARTS, CAN, CDN)

#### **Drugs and the Human Body**

Covers the biochemistry and physiology of drug action. Topics will include stimulants, depressants (rohypnol and alcohol), analgesics (pain relievers), steroids (oral contraceptives, RU486 - the abortion pill, and anabolic steroids), marijuana, hallucinogens, and drugs used to treat depression and anxiety. Emphasis will be placed on how these drugs work and how they affect the human body. (ATTR: CAN,CDN)

### Biology of Breast Cancer

A study of breast cancer through the lens of evolutionary medicine. Lecture, discussion and laboratory work on breast cancer will be used to explore how the biological disciplines of cell and development biology, endocrinology, genetics, and environmental biology are related to this disease. Studies of breast cancer screening, treatment, and incidence will be used to explore theories of cancer, and the use of evidence-based medicine. Illness narratives will be used to explore the cultural attitudes about breasts, lactation and breast cancer. A major emphasis of the course is the development of skill in reading primary medical literature on breast cancer. (ATTR: ARTS, CAN)

### BIOL—025. Human Biology (3 hours lecture) 3 credits

This course covers the principles of anatomy, physiology and genetics as applied to human health and disease. Content is focused on four systems: genetics and development, cardiovascular system, neuro-muscular system and digestive system and nutrition. Through study of clinical applications, students will understand 1) the biological basis of human diseases, 2) the physiological consequences of disease progression, including treatments and prevention and 3) how to access and use medical and scientific information to investigate questions in human biology. Demonstrations, experiments and readings will support these topics and allow exploration of ethical and other issues relevant to human biology. In addition, all students will take part in a long-term independent investigation of a case study in human health. Not open to biology majors. This course is designed to fulfill part of the School of Science Core requirement for School of Liberal Arts and School of Business students. (ATTR: ARTS, CAN, CDN)

### BIOL—040. Non-core Topics in Biology (3 hours lecture) 3 credits

A course similar to BIOL-010 and BIOL-020, except that the topics offered have not been approved to fulfill College Core requirements. Students earning a score of 4 or 5 on the Biology AP exam will receive credit for this course. Students may take this course more than once with different content. Does not count for College Core. (ATTR: ARTS)

### BIOL—110. General Biology I (3 hours lecture, 3 hours laboratory) 4 credits

Lectures covering the general principles of Biology with evolution as the unifying theme. Topics include the scientific method, mechanisms of evolution, genetics, biochemistry, cell structure and function. Lab work includes experiments designed to illustrate basic biological concepts. Emphases include developing and testing hypotheses and writing laboratory reports. This course is intended primarily for School of Science majors. Lab fee. (ATTR: ARTS, CAN)

### BIOL—120. General Biology II (3 hours lecture, 3 hours laboratory) 4 credits

This course is a continuation of BIOL—110. Emphasis is on the diversity of living organisms including morphology, phylogeny, physiology, and ecology of major taxa. Lab work includes experiments designed to illustrate basic biological concepts. Emphasis is on the diversity of life. This course is intended primarily for School of Science majors. Lab fee. Prerequisite: BIOL—110. (ATTR: ARTS, CAN)

### BIOL—130. General Biology IA for Social Sciences (3 hours lecture, 3 hours laboratory) 4 credits

Lecture and laboratory covering fundamental principles of biology including the scientific method, Darwinian theories on evolution and natural selection, cell theory and the genetic basis of evolutionary change. The course concludes with an introduction to cell biology, with an emphasis on organelle structure and function. Required course for Psychology Majors. Not open to Biology majors. Lab fee. (ATTR: ARTS, CAN, CDN)

### BIOL—140. General Biology IIA for Social Sciences (3 hours lecture, 3 hours laboratory) 4 credits

This course is a continuation of BIOL—130. Lecture and laboratory covering the general principles of physiology with emphasis on human physiology. Topics covered include homeostasis, complementarity of structure and function, and the physiology of a variety of organ systems. Prerequisite: BIOL—130 or BIOL—110 with a passing grade. Required course for Psychology majors. Not open to Biology majors. Lab Fee. (ATTR: ARTS, CAN, CFN)

### BIOL—170. Advanced General Biology (3 hours lecture, 3 hours laboratory) 4 credits

This course is designed for students who have taken advanced placement biology in high school and achieved a score of 4 or higher on the AP exam. Topics include evolution, classification, and diversity. Students enrolled in this course will choose from the same laboratory sections as those in BIOL—110. Prerequisite: permission of department. Not open to students who have taken BIOL—110 or BIOL—120. Lab fee. (ATTR: ARTS)

BIOL—180. Advanced General Biology Seminar (1 hour recitation, 3 hours laboratory) 2 credits

A survey of contemporary writings in the biological sciences designed to acquaint students with recent advances in the field and with the progression of biological thought. Students enrolled in this course will choose from the same laboratory sections as those in BIOL—120. Prerequisite: BIOL—170. Lab fee. (ATTR: ARTS, HNRS)

BIOL—190. Writing and Research Skills for Biologists (3 hour lecture) 3 credits

This course should be taken concurrently with BIOL—120 or BIOL—220. The purpose of this course is to enable students to present original data in a clear and well-organized report, modeled after the format of primary scientific research papers in biology. Students will receive instruction in various facets of the scientific method including: experimental design, data analysis and presentation, accessing and understanding the scientific literature, and the format of the primary research paper. The course emphasizes group workshops and includes extensive practice in writing, peer editing, and revising scientific papers. (ATTR: ARTS)

BIOL—200. Intermediate Topics in Biology (3 hour lecture) 3 credits

This course will explore, at an intermediate level, a biological topic not covered in regular course offerings. Course topics in the areas of morphology, physiology, cell/molecular biology or ecology are possible, as are topics of a more interdisciplinary nature. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with different content. Prerequisites: BIOL—110, 120 OR BIOL-130 and 140; OR BIOL-170 and 180, and in most cases additional prerequisites that will vary depending on the topic given—see schedule of classes. (ATTR: ARTS)

BIOL—220. Cell Biology (3 hours lecture, 4 hours laboratory) 4 credits

A study of the molecular organization of cells as it relates to function. The plasma membrane, the various membranous organelles, the nucleus, and the cytoskeleton are correlated to membrane transport, respiration, photosynthesis, cell growth and division, cell communication, basic genetic mechanisms, and cell motility. The labs are correlated to the lecture topics and are designed to introduce students to the techniques and equipment used in modern cell and molecular biology research. Prerequisites: BIOL—110 and 120 OR BIOL—130 and 140 OR BIOL—170 and 180; CHEM—110, 120. Lab fee. (ATTR: ARTS, CEMO)

BIOL—225. Ecology (2 hours lecture, 4 hours laboratory) 3 credits

A study of the interrelations of organisms with each other and the environment. The lectures are equally divided between ecosystem ecology (energy and material flux, modeling) population ecology (population dynamics, competition, predation) and community ecology (structure, diversity, and succession). The lab will emphasize methodology with weekly field trips to various local habitats. One weekend field trip to the Adirondack mountains is required. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180; OR permission of the instructor. May be taken as ENVA—250. Lab fee. (ATTR: ARTS, CFN, ORPO)

BIOL—230. Biology of the Vertebrates (2 hours lecture, 4 hours laboratory) 3 credits

A study of the vertebrates with an emphasis on evolution, ecology and behavior. While all classes of vertebrates are examined, fishes, reptiles and amphibians receive the most attention. Local species are studied in several natural habitats, such as streams marshlands and forests, where data are taken and subsequently analyzed using statistical software. The course will include a weekend field trip to, for example, the Connecticut coast to study the migration of shorebirds. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, CFN, ORPO)

BIOL—235. Tropical Biology (2 hours lecture, 2 week field trip) 3 credits

A study of ecological processes in tropical ecosystems, emphasizing the ecology of tropical rainforests. The laboratory portion of the course will involve two weeks of intensive field work in a tropical rainforest. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Written permission of instructor required. There is a separate field trip fee. (ATTR: ARTS, CFN, ORPO)

BIOL—240. Plant Ecology (2 hours lecture, 4 hours laboratory) 3 credits

Lectures cover in detail the natural history and ecology of plants with an emphasis on the communities of northeastern North America. Laboratories include field studies of local plants and two overnight weekend field trips to unique plant communities in the region. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, CFN, ORPO)

BIOL—245. Tropical Marine Ecology (2 hour lecture, 2 week field trip) 3 credits

A study of ecological processes in marine environments of the tropics. Lectures will emphasize the application of basic ecological principles to life in the ocean, then focus on characteristics of marine habitats in the tropics and of the groups of organisms that occur there. The laboratory portion of the course will involve two weeks of

intensive field work at a tropical marine laboratory. Because this field experience occurs after Commencement, seniors may not use this course to meet graduation requirements. They may take this course if a.) they are willing to miss commencement, and b.) they meet all graduation requirements without this course. As an alternative, seniors may postpone graduation until the next commencement. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Written permission of instructor required. There is a separate field trip fee. (ATTR: ARTS, CFN, ORPO)

BIOL—250. Biology of the Invertebrates (2 hours lecture, 4 hours laboratory) 3 credits  
A study of the morphology, physiology, ecology, and phylogenetic relationships of the invertebrates. The laboratory includes dissection of characteristic members of each phylum and experiments dealing with physiology and behavior. Prerequisites: BIOL—110, 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, MORP)

BIOL—255. Comparative Anatomy of the Vertebrates (3 hours lecture, 3 hours laboratory) 4 credits  
A study of the taxonomy, morphology, and evolution of the vertebrates. Emphasis will be placed on the nature of evolutionary processes and the resulting modifications in vertebrate morphology and function. The laboratory involves the detailed dissection of representative vertebrates. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, MORP)

BIOL—260. Molecular Genetics (3 hours lecture, 4 hours laboratory - optional) 3 or 4 credits  
Lecture: A review of classical genetics coupled with an introduction to molecular genetics. Topics include Mendel's laws, linkage, complex traits, genetic analysis, biochemistry of nucleic acids, gene expression, molecular cloning, gene therapy, human genome project and other contemporary topics. Prerequisites: BIOL—220, CHEM—210.

Optional laboratory: Use of the model genetic organisms, *Escherichia coli*, *Saccharomyces cerevisiae* and *Arabidopsis thaliana*, to demonstrate the power of genetic research. Students will use techniques of classical and molecular genetics to generate and characterize mutants. Laboratory may be taken independently for 1 credit if BIOL—260 was completed previously as lecture only (3 credits) with a grade of C or better. (ATTR: ARTS)

BIOL—265. Principles of Evolution (3 hours lecture) 3 credits  
A survey of the synthetic theory of organic evolution. Major topics include: historical development of evolutionary thought, population genetics, speciation mechanisms, and adaptation. Basic evolutionary theory will be complemented with a review of empirical evidence relating to the evolutionary processes in both natural and experimental populations. Topics in human evolution will be covered which include: the origin of man, evolution of bipedalism, and tool use. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. (ATTR: ARTS)

BIOL—270. Ornithology (3 hours lecture) 3 credits  
Birds (Aves) are perhaps the best-studied class of organisms on earth. Indeed, bird research has brought about many of the major advances in ecology, evolution, behavior and conservation. This course provides a comprehensive overview of bird biology, emphasizing the evolutionary origins and early radiation of birds, molecular systematics, behavior, ecology, communication and conservation. The laboratory will combine comparative studies of bird specimens with field investigations. Students will also design and conduct individual research projects. If taught in the spring, the laboratory portion of the course will be conducted as an off-campus field course (10-12 days) involving intensive outdoor research projects at various field stations, and will have a separate field trip fee. Written permission of the instructor is required when offered in the spring semester. Note - if taught in the spring, the field trip takes place after Commencement, so seniors would not be able to use this course to meet graduation requirements. Seniors can take this course in the spring if they 1) meet all graduation requirements without this course, or 2) are willing to postpone their official graduation until the next semester (they would still be able to walk in their graduation ceremony). Prerequisite: BIOL-110, 120, 170, 180 and minimum grade of C-. Lab fee.(ATTR: ARTS, CFN, ORPO)

BIOL—310. Plant Physiology (3 hours lecture, 4 hours laboratory) 4 credits  
The structural, biochemical, and cellular strategies that plants use to grow and develop will be explored. Topics will include photosynthesis and metabolism, control of water uptake, vascular systems, hormone signaling, environmental perception (light, gravity, day length, etc), and responses to environmental stress. Where possible, we will compare and contrast physiological and cellular processes in plants with equivalent ones found in animals. The laboratory corresponds closely with lecture, provides hands-on training in many modern physiological and cellular techniques, and includes a multi-week independent study project. There is typically a

field trip to the New York Botanical Garden at the end of the semester. Prerequisite: BIOL—220. Prior completion of BIOL—190 recommended. Lab fee. (ATTR: ARTS, PHYL)

BIOL—320. Microbiology (3 hours lecture, 4 hours laboratory) 4 credits

Lectures cover the morphology, physiology, and classification of bacteria, molds, yeast, and fungi. Laboratory work consists in employing the standard techniques of bacteriological staining; the culture of microorganisms on various media to determine their morphological and physiological characteristics; the isolation of microorganisms from soil, water, plants, and insects; and representative exercises which give an insight into the respiratory, enzymatic, biochemical, and fermentative activities of microorganisms. Prerequisite: BIOL—220. Lab fee. (ATTR: ARTS, CEMO).

BIOL—325. Behavioral Ecology (2 hours lecture, 4 hours laboratory) 3 credits

The course will explore the relationship between animal behavior, ecology and evolution. We will examine how animals behave under specific ecological conditions and ask why such behaviors evolved. Topics of particular interest include problems of finding living space, food, and mates; social interactions among individuals and groups; and the ways that behavior affects population size and location. One weekend field trip is planned. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, CFN, ORPO)

BIOL—330. Arthropod Biology (2 hours lecture, 4 hours laboratory) 3 credits

A study of aquatic and terrestrial arthropods integrating ecology and physiology with systematics. Laboratory work includes field studies of local habitats, and the investigation of unique arthropod physiological and behavioral adaptations. In addition, the pathological role of arthropods as parasites and disease vectors is considered. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, ORPO)

BIOL—335. Developmental Biology (3 hours lecture, 3 hours laboratory) 4 credits

This course is designed to give a firm background in classical animal embryology, as well as to introduce current questions of developmental biology at cellular, tissue, and organismal levels. Topics include gametogenesis, fertilization, early development and organogenesis. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, MORP)

BIOL—340. Histology (3 hours lecture, 3 hours laboratory) 4 credits

Morphology of cells, tissues, and organs with emphasis on the relationship of structure to function at each level of organization. Laboratory includes the study of electron micrographs of cells, histological slides of tissues and organs, and the preparation of slides. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180. Lab fee. (ATTR: ARTS, MORP)

BIOL—345. Developmental Genetics 4 credits

This course will examine the molecular mechanisms that control animal developmental processes. This will include a description of the genes and regulatory mechanisms that direct development in a range of animals, as well as the experimental basis for our understanding of these processes. The use of invertebrate model genetic organisms to identify conserved components and mechanisms of development will be highlighted. Prerequisites: BIOL-110, 120, 170, 180, 220 and 260. Lab fee. (ATTR: ARTS, CEMO)

BIOL—400. Advanced Topics in Biology 0-4 credits

This course will explore, at an advanced level, a biological topic not covered in regular course offerings. Course topics in the areas of morphology, physiology, cell/molecular biology or ecology are possible, as are topics of a more interdisciplinary nature. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with different content. Prerequisites: BIOL-110 and 120; OR BIOL-130 and 140; OR BIOL-170 and 180; and in most cases additional prerequisites that will vary depending on the topic given—see schedule of classes. In cases where a laboratory is offered, a lab fee will be assessed. (ATTR: ARTS)

BIOL—420. Biochemistry (3 hours lecture, 4 hours laboratory) 4 credits

An introduction to protein structure and function, enzyme kinetics, and the regulation of metabolism. Laboratory component provides experience with concepts and techniques introduced in lecture and features an independent project in protein purification using state-of-the-art column chromatography and gel electrophoresis equipment. Prerequisites: BIOL—220, CHEM—210; and either BIOL—190 or CHEM—311 (BIOL -190 or CHEM 311 may be taken concurrently). Lab fee. (ATTR: ARTS, CEMO)

BIOL—425. Molecular Biology (3 hours lecture, 4 hours laboratory) 4 credits

The course will cover the principles of gene structure, function, organization and expression in prokaryotes and eukaryotes. Some specialized aspects of eukaryotic genes such as gene mobility, gene rearrangement, cancer genes and animal virus genetics will be studied. Gene manipulation through recombinant DNA technology, and applications of this technology in basic research and industry will be discussed in lecture and illustrated through laboratory exercises involving the isolation, cloning and expression of genes in bacteria and mammalian cells. Prerequisite: BIOL—260. Lab fee. (ATTR: ARTS, CEMO)

BIOL—430. Animal Physiology (3 hours lecture, 4 hours laboratory) 4 credits

The functions of organ systems of invertebrates and vertebrates will be covered with emphasis on the interdependent relationships of organ systems and their regulatory mechanisms. Topics covered in lecture and laboratory are the nervous, muscular, circulatory, respiratory and excretory systems, as well as principles of environmental physiology including discussion of ionic, osmotic, and thermal regulation. Prerequisite: BIOL—220. Lab fee. (ATTR: ARTS, PHYL)

BIOL—440. Neurobiology (3 hours lecture, 4 hours laboratory) 4 credits

The lectures will cover the structure and function of individual neurons and neuronal circuits in both invertebrate and vertebrate species. Topics will include electrical signalling and action potentials, ion channels, synaptic transmission, neuronal plasticity, and general principles governing sensory and motor processing. The laboratory will provide students with hands on experience using fundamental electrophysiological techniques. Students will also investigate neuronal function using computer simulations of ion channels, neurons and circuits. Prerequisite: BIOL—220. Lab fee. (ATTR: ARTS, PHYL)

BIOL—450. Comparative Biomechanics 4 credits

The lectures will cover organism structure and function in terms of mechanical principles. The course will focus on biological examples to introduce the basics of fluid and solid mechanics with topics including properties of biological materials, muscle function, and terrestrial, aquatic, and aerial locomotion. The laboratory will provide students with hands on experience using fundamental biomechanical techniques to study both human and other organismal subjects. Prerequisites: BIOL-220; and either PHYS-110 or 130 (may be taken concurrently). Lab fee. (ATTR: ARTS, PHYL)

BIOL—460. Immunology (3 hours lecture) 3 credits

The cellular basis of the humoral and cell mediated immune response will be covered with emphasis on the mechanisms of cell cooperation. Topics covered are: lymphocyte populations, the role of the macrophage, immunoglobulin synthesis and the generation of diversity, the genetics of the immune response and the role of the major histocompatibility complex, the complement system and the development of hypersensitivities. Prerequisite: BIOL—220, 260. (ATTR: ARTS)

BIOL—465. Conservation Biology (2 hours lecture, 4 hours laboratory) 3 credits

Modern conservation biology employs an integrative approach to biodiversity protection and management using principles and experiences from ecology, natural resource management, and the social sciences. Topics include biological diversity, valuation systems, adaptation and extinction, minimum viable populations, management of invasive and endangered species, and the design of nature preserves. Lab and field problem-solving exercises focus on population size, habitat fragmentation, and restoration ecology. Prerequisite: BIOL—225. (May be taken as ENVA—450.) Lab fee. (ATTR:ARTS)

BIOL—490. Biology Seminar 1 credit

Offered each semester with a topic selected to serve as a central theme for that semester. One meeting each week for presentations by students, faculty, and guests. May be taken more than once with different content. Consult fall and spring schedules for specific topics. Written permission of instructor required. (ATTR: ARTS)

BIOL—499. Independent Research in Biology 1 - 3 credits

Laboratory or field research of an original nature under the direction of a faculty member. Arranged by mutual consent of student and faculty member. Credit for independent research may be earned in more than one semester. Normally taken for 2 credits, but may be taken for 1 or 3 credits with approval of department head. Attendance at all departmental colloquia required. Written permission of instructor required.(ATTR: ARTS)

## Chemistry and Biochemistry Department

Chair: Dr. Daniel Moriarty, Assoc. Prof.

Assoc. Prof.: Dr. Jason Hofstein, Dr. Thomas S. Hughes

Dr. Jodi L. O'Donnell, Dr. Kevin Rhoads

Asst. Prof.: Dr. George Barnes, Dr. Stephen Deyrup, Dr. Jesse W. Karr, Dr. Erin Kolonko, Dr. Lucas Tucker

The Chemistry and Biochemistry Department provides students with the opportunity to develop a strong foundation in chemical principles and their laboratory applications. This foundation enables Chemistry and Biochemistry graduates to pursue a wide range of careers in chemical industry, research, chemical education, chemical and biochemical engineering, or in interdisciplinary fields such as medicine, dentistry, other health professions, environmental science, biochemistry, forensic science, or patent law.

Five courses of study are offered:

1. B.S. in Chemistry. This program provides chemistry students with a foundation in a variety of chemical subdisciplines. This option is recommended for students who require more scheduling flexibility than the ACS accredited track allows. This may include students pursuing certification in secondary education or who wish to study abroad, as well as students planning on graduate study in chemistry or employment in the chemical industry.
2. B.S. in Chemistry accredited by the American Chemical Society (ACS). This program leads to certification by the ACS upon graduation and requires both a research experience and a written thesis. This program is recommended for students planning on graduate study in chemistry or employment in the chemical industry.
3. B.S. in Biochemistry. The Biochemistry Major is an interdisciplinary major incorporating selected courses in chemistry and biology, as well as courses in physics and mathematics, to give students a well-rounded grounding in Biochemistry. The Biochemistry Major is excellent preparation for careers in the health profession or for graduate studies not only in biochemistry but also in related fields such as molecular biology, biotechnology, pharmacology, and medicinal chemistry.
4. The 3/2 Cooperative Engineering (five-year) program. In this program, students earn an ACS-accredited B.S. degree in Chemistry from Siena and a B.Ch.E. from an affiliated institution. It is tailored for students desiring a career in Chemical Engineering. The affiliated institutions are: Catholic University, Rensselaer Polytechnic Institute, Clarkson University, Manhattan College and Western New England College. Each student will meet with the Engineering Coordinator at least once each semester.

The Chemistry and Biochemistry Department has laboratories for instruction in the basic Chemistry courses, as well as research laboratories, stockrooms, seminar rooms, departmental reading rooms, and computer facilities. Advanced laboratories are designed to allow flexibility in selecting experiments and conducting special projects. Advanced students have opportunities for course credit through external internships and independent research projects under faculty supervision.

Instrumentation is very important in modern chemical practice. Available instruments within the Chemistry and Biochemistry Department include: ultraviolet/visible spectrophotometers, Fourier transform infrared spectrometers, 400 MHz nuclear magnetic resonance spectrometer, atomic absorption spectrometer, luminescence spectrometer, gas chromatographs, high performance liquid chromatographs, magnetic susceptibility balance, polarimeters, electrochemical analyzer, thermal gravimetric analyzer (TGA), differential scanning calorimeter (DSC), glovebox, lyophilizer, and a gel electrophoresis system. Many of these instruments are interfaced with computers.

Advanced Placement (AP) Chemistry: Students scoring a 4 or a 5 on the AP exam are granted three credits for CHEM 040.

### Requirements for the Major, B.S. in Chemistry ( 39.000 credits ):

CHEM 110 - General Chemistry 1	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
CHEM 220 - Organic Chemistry II	4 cr.
CHEM 225 - Analytical Chemistry 1	3 cr.
CHEM 240 - Inorganic Chemistry 1	3 cr.
CHEM 310 - Thermodynamics and Chemical Equilibrium	3 cr.
CHEM 311 - Chemical Communications	1 cr.
CHEM 315 -Physical Chemistry Lab	1 cr.

CHEM 320 - Quantum Mechanics and Spectroscopy	3 cr.
CHEM 415 - Analytical Chemistry II	2 cr.
CHEM 426 - Senior Research	1 cr.
CHEM 428 - Physical Biochemistry	3 cr.
CHEM 429 - Physical Biochemistry Lab	1 cr.
CHEM 430 - Inorganic Synthesis	1 cr.
One additional course above CHEM 300 must be taken to complete the major	1 cr.

**Auxiliary (16.000 credits )**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.

**Requirements for the Major, B.S. in Chemistry ( 39.000 credits )  
with accreditation by the American Chemical Society (ACS):**

CHEM 110 - General Chemistry 1	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
CHEM 220 - Organic Chemistry II	4 cr.
CHEM 225 - Analytical Chemistry 1	3 cr.
CHEM 240 - Inorganic Chemistry 1	3 cr.
CHEM 310 - Thermodynamics and Chemical Equilibrium	3 cr.
CHEM 311 - Chemical Communications	1 cr.
CHEM 316 - Integrated Laboratory 1	1 cr.
CHEM 320 - Quantum Mechanics and Spectroscopy I	3 cr.
CHEM 326 - Integrated Laboratory II	1 cr.
CHEM 340 - Inorganic Chemistry II	3 cr.
CHEM 415 - Analytical Chemistry II	2 cr.
CHEM 416 - Integrated Laboratory III	1 cr.
CHEM 427 - Capstone Independent Study	1 cr.
CHEM 428 - Physical Biochemistry	3 cr.

**Auxiliary (16.000 credits)**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.

\*This program requires both a research experience and a written thesis.

\*Certification by the ACS requires the approval of a candidate by the Chemistry & Biochemistry Department.

**Requirements for the Major, B.S. in Biochemistry ( 53.000 credits ):**

BIOL 220 - Cell Biology	4 cr.
BIOL 260 - Molecular Genetics	3 cr.
BIOL 420 - Biochemistry	4 cr.
BIOL 320 - Microbiology	<b>OR</b>
BIOL 255 - Comparative Anatomy of the Vertebrates	<b>OR</b>
BIOL 425 - Molecular Biology	4 cr.
CHEM 110 - General Chemistry 1	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
CHEM 220 - Organic Chemistry II	4 cr.
CHEM 225 - Analytical Chemistry 1	3 cr.
CHEM 240 - Inorganic Chemistry 1	3 cr.
CHEM 310 - Thermodynamics and Chemical Equilibrium	3 cr.
CHEM 425 - Biochemical Mechanisms	3 cr.
CHEM 426 - Senior Research	1 cr.
CHEM 429 - Physical Biochemistry Lab	1 cr.

BIOL 110 - General Biology I **OR**

BIOL 170 - Advanced General Biology		4 cr.
BIOL 120 - General Biology II	<b>OR</b>	4 cr.
BIOL 180 - Advanced General Biology Seminar		2 cr.
BIOL 190 - Writing/Researching Skills for Biology	<b>OR</b>	2 cr.
CHEM 311 - Chemical Communications		1 cr.

**Auxiliary ( 16.000 credits )**

MATH 110 - Calculus I		4 cr.
MATH 120 - Calculus II		4 cr.
PHYS 110 - Gen Physics IA	<b>OR</b>	
PHYS 130 - General Physics I		4 cr.
PHYS 120 - General Physics IIA	<b>OR</b>	4 cr.
PHYS 140 - General Physics II		

**Requirements for the Major, B.S. in Chemistry 3/2 Option (39.000 credits) (five-year program):**

CHEM 110 - General Chemistry I		4 cr.
CHEM 120 - General Chemistry II		4 cr.
CHEM 210 - Organic Chemistry I		4 cr.
CHEM 220 - Organic Chemistry II		4 cr.
CHEM 225 - Analytical Chemistry I		3 cr.
CHEM 240 - Inorganic Chemistry I		3 cr.
CHEM 310 - Thermodynamics and Chemical Equilibrium		3 cr.
CHEM 311 - Chemical Communications		1 cr.
CHEM 316 - Integrated Laboratory I		1 cr.
CHEM 320 - Quantum Mechanics and Spectroscopy I		3 cr.
CHEM 326 - Integrated Laboratory II		1 cr.
CHEM 340 - Inorganic Chemistry II		3 cr.
CHEM 415 - Analytical Chemistry II		2 cr.
CHEM 416 - Integrated Laboratory III		1 cr.
CHEM 427 - Capstone Independent Study		1 cr.
CHEM 428 - Physical Biochemistry		3 cr.

**Auxiliary (29.000 credits)**

CSIS 110 - Introduction to Computer Science		3 cr.
MATH 110 - Calculus I		4 cr.
MATH 120 - Calculus II		4 cr.
MATH 210 - Calculus III		4 cr.
MATH 380 - Differential Equations		3 cr.
PHYS 130 - General Physics I		4 cr.
PHYS 140 - General Physics II		4 cr.
PHYS 210 - General Physics III	<b>OR</b>	4 cr.
PHYS 220 - Modern Physics	<b>OR</b>	
PHYS 230 - Electronic Instrumentation		3 cr.

Core requirement of 6 credits of social science may be deferred.

Tailored for students desiring a career in Chemical Engineering.

Students spend the first 3 years at Siena and the last 2 years at one of the following cooperating institutions: Catholic University, Rensselaer Polytechnic Institute, Clarkson University, Manhattan College, or Western New England College.

Students earn an ACS-accredited B.S. degree in Chemistry from Siena as well as a B. Ch. E. from the chosen institution.

Students must earn a C- or better in any Chemistry course listed as a prerequisite for the following Chemistry courses: CHEM-225, CHEM-240, CHEM-310, CHEM-311, CHEM-316, CHEM-320, CHEM-326, CHEM-340, CHEM-415, CHEM-416, CHEM-425, CHEM-426, CHEM-427 and CHEM-428.

Requirements for initial teaching certificate in secondary education in chemistry: Satisfactory completion of any track for a degree in chemistry and all required Education Department courses. Admission to the professional semester requires approval of the Chemistry and Biochemistry Department and the Education Professional Committee, which normally expects a 2.50 GPA in chemistry, a 2.75 overall GPA, and a demonstration of strong communication skills.

**Requirements for the Minor, Chemistry (18.000 credits):**

CHEM 110 – General Chemistry I	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
Three additional classes with course numbers CHEM 225 or higher, and at least one of which must have course number 310 or higher.	6 cr.

### Description of Courses

CHEM—010. Topics in Chemistry 3 credits

A survey course of lectures, demonstrations, and laboratories in the principles of chemistry including a discussion of topics of contemporary interest. This course is usually offered with emphasis on a specific topic. When such an offering occurs, the content will be designated by a subtitle. The course is designed to fulfill part of the School of Science Core requirement for School of Liberal Arts and School of Business students, as well as Business and Social Science track Computer Science students. It may be taken more than once with different content. (ATTR: ARTS, CAN) An example of a special topic follows:

Chemistry in the News

This course will provide a basic background in chemical principles and processes in the context of their role in environmental, health and consumer issues. Topics covered may include ozone depletion, acid rain, global warming, nuclear power and alternative energy sources, recycling, pharmacology, food additives and polymers. The goal of this course is to enable students as informed consumers to critically evaluate scientific issues which have a crucial impact on their lives. (CDN)

CHEM—025. Concepts of Environmental Chemistry 3 credits

The course will provide a basic background in chemical principles and processes in the context of their role in environmental issues. Topics to be discussed include ozone depletion, acid rain, global warming, and general uses and misuses of our natural resources. The goal of the course is to enable students as informed consumers to critically evaluate scientific issues which have a crucial impact on our world. Not open to Biology or Chemistry majors. (ATTR: ARTS, CAN, CDN)

CHEM—040. Non-core Topics in Chemistry 3 credits

A course similar to CHEM010, except that the topics offered have not been approved to fulfill College Core requirements. Students earning a score of 4 or 5 on the Chemistry AP exam will receive credit for this course. Students may take this course more than once with different content. CHEM040 does not count for College Core. (ATTR: ARTS)

CHEM—050. Chemistry in the Kitchen 3 credits

This course serves as an introduction to basic science and chemical principles that are encountered in everyday interactions with food and cooking. The influence of food on history will also be examined. It is designed to fulfill part of the School of Science core requirement for School of Liberal Arts and School of Business students. (ATTR: ARTS)

CHEM—055. Appreciating Paper: The Chemistry of Making, Recycling, and Using the Medium 3 credits

This course will have an informational discussion of the role chemistry plays in the paper industry. Topics will include the chemistry of how paper is made, what gives it its strength, and what makes it recyclable. We will then move on to the topic of greening up of the environment as it pertains to paper production; the ecological, social, and engineering aspects of paper production and recycling, as well as the act of making your own paper from readily available sources (the students will get to do this in class). Continuing the discussion of the use of paper as a medium, we will focus on the use of paper as an artistic medium. Whether it is a certain choice of canvas for painting or production of tissue paper for flower-making, we will discuss paper's various uses in the art world from a scientific basis. We will conclude by using our knowledge of the science and philosophy of

paper and papermaking to discuss, touch, and use various types of paper to do origami projects. The seven axioms of geometrical origami will start the student's orientation into the world of origami, showing them how to fold and manipulate paper. We will discuss the origins of origami, from ancient Japanese toys through the Yoshizawa era. We will also get to discuss and possibly use advanced origami techniques that utilize sizing solutions to help the paper conform to various shapes (a practice called wet-folding). (ATTR: ARTS)

**CHEM—110. General Chemistry I (Lecture and Laboratory) 4 credits**

Lecture and laboratory covering the fundamental laws and principles of chemical structure and reactivity. Interactive laboratories focus on rediscovery of these principles and mastery of basic laboratory techniques including an introduction to chemical instrumentation and digital data analysis. Three hours of lecture, one hour of studio laboratory, and three hours of practical laboratory each week. Lab fee. (ATTR: ARTS, CAN, CDN)

**CHEM—120. General Chemistry II (Lecture and Laboratory) 4 credits**

Lecture and laboratory covering topics in thermodynamics, equilibrium, acids and bases, chemical kinetics, and electrochemistry. Laboratory focuses on chemical analysis by traditional and modern techniques with emphasis on instrumental methods as well as digital data acquisition and analysis. Three hours of lecture, one hour of studio laboratory, and three hours of practical laboratory each week. Prerequisite: CHEM—110. Lab fee. (ATTR: ARTS, CAN)

**CHEM—210. Organic Chemistry I (Lecture and Laboratory) 4 credits**

An introduction to the chemistry of carbon compounds, including the study of bonding, structure, nomenclature, physical and spectroscopic properties, methods of preparation, and reactivity of alkanes, alkenes, alkynes, alkyl halides, and alcohols. Separation and purification techniques are stressed in the laboratory and reaction products are analyzed by spectroscopic and chromatographic methods, including GC, HPLC, FTIR, and FT-NMR. Three hours of lecture and four hours of laboratory each week. Prerequisite: CHEM—120 or consent of Instructor. Lab fee. (ATTR: ARTS)

**CHEM—220. Organic Chemistry II (Lecture and Laboratory) 4 credits**

A continuation of CHEM—210 with emphasis on the functional group chemistry of aromatics, alcohols, ethers, carbonyl compounds, carboxylic acids and their derivatives, and bio-organic molecules. Resonance theory, conjugation, aromaticity, multistep organic syntheses, and reaction mechanisms are explored in detail. Functional group chemistry and multistep syntheses are stressed in the laboratory, along with spectroscopic and chromatographic analysis of products. Three hours of lecture and four hours of laboratory each week. Prerequisite: CHEM—210. Lab fee. (ATTR: ARTS)

**CHEM—225. Analytical Chemistry I (Lecture and Laboratory) 3 credits**

Lecture and laboratory address the application and theory of various analytical methods including gravimetric, electrochemical, and spectrophotometric analysis, chromatography and statistical treatment of data and error analysis. Two hours of lecture and four hours of laboratory each week. Prerequisites: CHEM—120. Lab fee. (ATTR: ARTS)

**\*CHEM—230. Environmental Chemistry (Lecture and Laboratory) 4 credits**

An introduction to the chemical processes that occur in water, air, and soil, and the effects of pollutants on these processes. Consumption of and reliance on limited natural resources will be studied, along with emerging alternative energy sources. The laboratory will emphasize environmental sample collection and preparation, and analysis of these samples by both wet chemical methods and instrumental analysis. Three hours of lecture and four hours of laboratory each week. May be taken as ENVA—290. Lab fee. (ATTR: ARTS)

**CHEM—240. Inorganic Chemistry I (Lecture) 3 credits**

An introduction to quantum mechanics/atomic structure, periodicity, valence bond theory, solid state structure/thermodynamics, and the descriptive chemistry of the Main Group. Two hours of lecture each week. Prerequisite: CHEM—110. (ATTR: ARTS)

**CHEM—305. Intermediate Topics in Organic Chemistry (Lecture) 1 – 3 credits**

This lecture course will build on the material covered in Chem 210/220, and will cover in more detail the structural and physical properties of organic molecules and the reactions they undergo. The structure and physical properties of complex organic molecules will be covered, including sources of strain energy and steric hindrance and their effects on chemical reactivity. The properties of various chemical reaction intermediates, such as carbocations, radicals, carbanions and carbenes will be discussed, as will their involvement in chemical reaction mechanisms. More detailed descriptions of the mechanisms of the reactions covered in Chem 210/220 will be presented, as will the class of pericyclic reactions and the Woodward-Hoffmann rules that govern them

(not covered in Chem 210/220). This enhanced vocabulary of organic reactions will then be used to learn the planning of the synthesis of organic molecules. Prerequisites: CHEM—220. (ATTR: ARTS)

CHEM—310. Thermodynamics and Chemical Equilibrium (Lecture) 3 credits

The application of mathematics and physics to the solution of macroscopic problems in chemistry. Topics include the properties of ideal and real gases, extensive and intensive properties, the laws and mathematics of thermodynamics, the chemical potential, chemical equilibrium of single and multiphase systems, ideal and real solutions, ionic solutions and electrochemistry, introductory chemical kinetics and kinetic molecular theory. Prerequisites: MATH—120, PHYS—120 or 140; and CHEM—120. It is strongly recommended that a grade of C or better be earned for each prerequisite course. (ATTR: ARTS)

CHEM—311. Chemical Communications (Lecture) 1 credit

This course addresses the conventions and style of all forms of communications in chemistry: scientific writing, oral presentations, presentation of data in tables and figures. This course meets one hour each week. Prerequisite: CHEM—220. Must be taken concurrently with either CHEM—316 or BIOL—420. Permission of instructor required. (ATTR: ARTS)

CHEM 315 –Physical Chemistry Lab 1 credit

A laboratory course in the study of physical chemistry. The objectives of this course are: (1) To provide the student with practical experience in the techniques of experimental physical chemistry. (2) To deepen the student's understanding of the principles of thermodynamics, kinetics, and spectroscopy through experimentation. (3) To develop more sophisticated and independent chemical laboratory skills in the student. (4) To increase the student's ability to communicate effectively and professionally both in writing and in speech. Three hours of lecture, one hour of studio laboratory each week. Prerequisite: MATH-120, PHYS-120 or 140, CHEM-120 CHEM—310. (ATTR: ARTS)

CHEM—316. Integrated Laboratory I (Laboratory) 1 credit

This laboratory course introduces students to experimental methods applied to thermodynamic and material science investigations. Techniques such as vacuum line manipulations, uv/vis spectrometry, calorimetry, NMR spectroscopy, and refractometry, are used to study phase diagrams, ideal and non-ideal behavior, equilibria, electrochemistry, and thermodynamic state functions. Polymers are synthesized and analyzed by viscometry and chromatographic techniques. The use of computers for data acquisition is emphasized. Four hours of laboratory each week. Prerequisites: CHEM—210 and CHEM—310 or current enrollment in CHEM—310; or consent of instructor. Lab fee. (ATTR: ARTS)

CHEM—320. Quantum Mechanics and Spectroscopy 3 credits

This course uses mathematical methods to solve both macroscopic and microscopic problems in chemistry. Specific emphasis will be on chemical kinetics, quantum mechanics, and the theory and practice of atomic and molecular spectroscopy. Topics include the applications of chemical kinetics, experimental foundations of quantum theory, postulates of quantum mechanics, solutions of the Schrodinger equation for simple systems, the hydrogen atom, angular momentum, selection rules and atomic spectroscopy, Huckel molecular theory, symmetry and group theory, rotational, vibrational, and electronic spectroscopy, and experimental applications of molecular spectroscopy. Three hours of lecture, one hour of studio laboratory each week. Prerequisite: MATH-120, PHYS-120 or 140, CHEM-120. (ATTR: ARTS)

CHEM—321. Chemical Kinetics (Lecture) 2 credits

This covers basic concepts in chemical kinetics. A central theme is the understanding of rates of chemical reactions, and what they tell us about chemical reactions. This includes: determination of rate laws, the use of rate laws to derive reaction mechanism, and the extrapolation of kinetic data to explore molecular dynamics. Ab Initio calculation of transition state structure and properties will be discussed. Prerequisites: MATH-120 or 130, PHYS-120 or 140, CHEM-120 or permission of instructor. (ATTR: ARTS)

CHEM—326. Integrated Laboratory II (Laboratory) 1 credit

This laboratory course introduces modern synthetic methods of inorganic chemistry, and the study of the kinetics, quantum mechanics and spectroscopy relevant to the synthesized compounds. The laboratory emphasizes the use of instrumentation such as Fluorescence/Phosphorescence, NMR, UV/Vis., and IR spectroscopies, electrochemical analysis, magnetic susceptibility determination, as well as digital data collection and analysis via PCs. An independent research project is part of this course. Four hours of laboratory each week. Prerequisites: CHEM—320 or current enrollment in CHEM—320, CHEM—340 or current enrollment in CHEM—340, or consent of instructor. Lab fee. (ATTR: ARTS)

CHEM—330. Chemical Ecology (Lecture) 3 credits

This course delves into the interdisciplinary field of Chemical Ecology through lectures and a week-long trip to Florida during Spring Break. Chemical Ecology is the study of how organisms interact through chemical means. We will explore topics including pheromones, hormones, chemical defenses, sequestration of chemicals, and biosynthetic origins of molecules. Prior to the trip to Florida, you will be provided with the fundamental knowledge base upon which you can build through experiential learning. The trip to Florida will include a 5 day/5 night stay at an independent biological research station (The Archbold Biological Station). Once in Florida, we will explore the world of chemical ecology through the primary literature, talks by the professor, guest lectures, and hands-on experience. Prerequisite: CHEM-210. There is a field trip fee. (ATTR: ARTS)

CHEM—340. Inorganic Chemistry II (Lecture) 3 credits

An extensive treatise on molecular orbital theory/bonding, symmetry/group theory, spectroscopy, kinetics/reaction mechanisms, and photochemistry of transition metal coordination compounds. Special topics such as the chemistry of metalloenzymes, organometallic compounds, the chemistry of materials, or industrial catalysis may also be covered as time permits. Prerequisites: CHEM—240 and CHEM—310 or CHEM—320 or consent of the instructor. (ATTR: ARTS)

CHEM—348. Organometallic Chemistry (Lecture) 2 credits

In this class, we will study of the basic principles of the organometallic chemistry of the d-block elements. Topics will include a survey of coordination chemistry, the properties and reactions of organometallic complexes, and applications of organotransition metal compounds in catalysis, organic synthesis, bioinorganic chemistry and medicinal chemistry. In addition to lectures, we will discuss current literature in the field. Prerequisites: CHEM—220 and CHEM—240. (ATTR: ARTS)

CHEM—370. Symmetry and Spectroscopy (Lecture) 3 credits

This course is divided into five modules that address the fundamentals of group theory, qualitative aspects of quantum mechanics, vibrational spectroscopy, molecular orbital theory and electronic spectroscopy. Symmetry and group theory will be applied to the interpretation of molecular orbital interactions, ligand field theory, molecular vibrations, and angular momentum. An introduction to molecular spectroscopy, including vibrational, rotational, and electronic spectroscopy, as well as NMR, Raman, and Mossbauer spectroscopy will be discussed as they pertain to symmetry operations. Molecular symmetry will also be used to interpret optical activity and dipole moments, and spectroscopic interpretation through representation of groups, reducible and irreducible representations, The Great Orthogonality theorem, SALCs, and projection operators. Both spectroscopic and computational methods of demonstration will be used throughout the course. Prerequisites: MATH—120 or permission of the instructor(s). (ATTR: ARTS)

CHEM—405. Advanced Topics in Organic Chemistry (Lecture) 1 - 3 credits

This lecture course will build on the material covered in CHEM 210/220, and will cover in more detail the structural and physical properties of organic molecules and the reactions they undergo. Advanced chemical reactions will be covered, including complex skeletal rearrangements, multicomponent reactions, and the impacts of neighboring group participation. This advanced vocabulary of organic reactions will be used to learn the strategies behind the synthesis of complex organic molecules. Concepts of physical organic chemistry, such as reaction kinetics, isotope effects, linear free energy relationships and reaction mechanism determination will be covered. Structural determination using 1- and 2-D NMR, MS and other techniques will be discussed. Prerequisites: CHEM—220 or permission of instructor. (ATTR: ARTS)

CHEM—415. Analytical Chemistry II (Lecture) 2 credits

This course covers the theoretical and practical application of several advanced instrumental techniques. These techniques include a variety of spectroscopy methods, gas and liquid chromatography, mass spectrometry, and electrochemistry. One hour of lecture each week. Prerequisites: CHEM—210, CHEM—220 and CHEM—225. (ATTR: ARTS)

CHEM—416. Integrated Laboratory III (Laboratory) 1 credit

Instrumental methods of structure determination and quantitative analysis with an emphasis on advanced instrumental methods used in organic chemistry and biochemistry are covered in this course. Advanced analytical techniques will include liquid and gas chromatography, spectroscopy, and biochemical separation techniques. Four hours of laboratory each week. Prerequisites: CHEM—220, CHEM—225, CHEM—310, CHEM—316, and current enrollment in CHEM—415. Lab fee. (ATTR: ARTS)

CHEM—418. Polymer Chemistry (Lecture) 3 credits

This course introduces the structural, physical, and chemical properties of polymeric macromolecules, the thermodynamic and kinetic properties that govern their various features. The synthesis and characterization of these molecules will be investigated. This course will emphasize many of the various techniques of regulating polymerization. Prerequisites: CHEM—210 and CHEM—310 concurrently. (ATTR: ARTS)

CHEM—425. Biochemical Mechanisms (Lecture) 3 credits

This course explores special topics in biochemistry including a close examination of biochemical reaction mechanisms and enzyme kinetics, and readings from the current biochemical literature. Prerequisites: CHEM—220; CHEM—310; completion or concurrent registration in BIOL—420; or consent of the instructor. (ATTR: ARTS)

CHEM—426. Senior Research (Laboratory) 1 credit

In this laboratory-based course, students independently develop and investigate a research project as a capstone experience. The investigation will be an extension of skills and techniques acquired in previous integrated laboratories. The course culminates in a written senior thesis and oral presentation. Four hours of laboratory each week. Prerequisites: CHEM—310, CHEM—316. Lab fee. (ATTR: ARTS)

CHEM—427. Capstone Independent Study 1 credit

Students perform an independent study on a chemistry topic of their choice. The project requires approval of the faculty mentor and may involve curriculum development or laboratory improvement. The course culminates in a written summary and oral presentation. Prerequisites: CHEM—310, CHEM—316. (ATTR: ARTS)

CHEM—428. Physical Biochemistry (Lecture) 3 credits

This course covers the concepts of biochemistry. It focuses on the fundamental principles of physical and organic chemistry as they apply to the behavior of biological molecules. Three hours of lecture each week. Prerequisites: CHEM—220, CHEM—310 and 320 or consent of the instructor. (ATTR: ARTS)

CHEM—429. Physical Biochemistry Laboratory (Laboratory) 1 credit

This laboratory course gives students a hands-on introduction to the physical nature of biological macromolecules. Topics such as the thermodynamic impact on the structure of these macromolecules and the interactions between the macromolecules and small biological molecules will be investigated. This course will emphasize many of the various techniques commonly encountered in a biochemistry laboratory such as Fluorescence and UV-Vis spectroscopies, biocalorimetry, and limited proteolysis. This course will also cover many of the common approaches to biochemical data analysis such as computer modeling and bioinformatics searches. Prerequisite: CHEM—220 and concurrency: CHEM—310 and CHEM—428 or BIOL—420. (ATTR: ARTS)

CHEM—460. Advanced Topics in Biochemistry (Lecture) 1-3 credits

This course covers advanced topics in biochemistry, and focuses on issues and techniques which are at the forefront in the current literature. Topics can include spectroscopic and computational approaches to studying protein and nucleic acid structures; thermodynamics and kinetics of protein folding; the solution behavior of macromolecules; principles that govern molecular recognition; enzyme kinetics and mechanisms, lipids and lipoproteins, metalloprotein structure and functions, and techniques used to determine the three-dimensional structures of biological macromolecules. Prerequisites: CHEM—220. (ATTR: ARTS)

CHEM—470. Advanced Environmental Chemistry (Lecture) 1 credit

Environmental Chemistry, is the study of natural and anthropogenic substances in the environment. Specifically, the course will cover the source, transport, reactions, effects and fate of chemicals in the atmosphere, hydrosphere and lithosphere. The course will also examine the distribution and interaction of chemical substances these three "spheres". Prerequisites: CHEM—120 and CHEM—220. (ATTR: ARTS)

CHEM—480. Computational Chemistry (Lecture) 3 credits

This introductory course in computational chemistry will discuss molecular mechanics, molecular dynamics, semi-empirical, and particularly *av initio* computational approaches. Students will learn to run major computational chemistry software packages on state-of-the-art workstations (Spartan, Gaussian, GAMESS, VASP, TINKER). The selection of appropriate techniques for solving a variety of chemical problems will be emphasized. The focus of the course will also be on the analysis, visualization, and interpretation of results from calculations employing the various computational methods. A good undergraduate-level quantum chemistry background is expected. Prerequisites: MATH—120 and CHEM—320, or permission of the instructor. (ATTR: ARTS)

\*\*\*CHEM—490. Chemistry Seminar No credit

Student papers on topics approved by the Chemistry faculty are presented and discussed. (ATTR: ARTS)

\*\*\*CHEM—499. Independent Research 1 - 3 credits

Original laboratory and literature research under the direction of a faculty member. The course is arranged by mutual consent of student and faculty member. (ATTR: ARTS)

## Computer Science Department

Chair: Dr. Mary Anne Egan, Prof.

Prof.: Dr. Robin Flatland, Dr. Timothy C. Lederman, Mr. James R. Matthews, Dr. Larry Medsker,  
Dr. James R. Nolan, Dr. Scott Vandenberg, Dr. Robert Yoder

Assoc. Prof.: Dr. Eric Breimer, Dr. Darren Lim

Asst. Prof.: Dr. Margaret S. Fryling, Ms. S. Johanna Horowitz, Dr. Sharon Small

Instructor: Bro. Walter J.M. Liss, O.F.M.

Visiting Asst. Prof.: Dr. Ira Goldstein

Visiting Instructor: Ms. Jami L. Cotler, Mr. Daniel DiTursi

The Computer Science program at Siena features excellent facilities, full-time dedicated faculty and a wide variety of educational and career opportunities. The program is oriented towards “hands on” computing in a small class environment. Laboratory experiences are an essential component of many courses, so that students can work closely with our faculty. Beginning with the first course, students develop their abilities to solve problems, analyze, synthesize, think critically and communicate. Many courses require group projects and intensive teamwork.

Students interested in a Physics/Computer Science double major should choose the “Computational Physics Track” for the Physics major. This allows some Computer Science courses to count for both majors.

### Requirements for the Major, B.S. in Computer Science ( 35.000 credits and 11 courses ):

CSIS 120 - Intro to Programming		4 cr.
CSIS 210 - Data Structures		3 cr.
CSIS 220 - Assembly Lang and Comp Architecture		4 cr.
CSIS 225 - Object-Oriented Des and Prog		3 cr.
CSIS 385 - Analysis of Algorithms		3 cr.
CSIS 410 - Software Engineering I		3 cr.
CSIS 415 - Software Engineering II		3 cr.
CSIS 110 - Intro to Computer Science	<b>AND</b>	3 cr.
3 additional courses between CSIS 310 and 499		9 cr.
	<b>OR</b>	
4 additional CSIS electives between 310 and 499		12 cr.

Note: CSIS-251 and CSIS-351 may not be applied toward the required CSIS credits in Computer Science, however, CSIS-351 (Discrete Structures II) may apply towards the required CSIS credits if a student is a double CS/Physics major taking the Computational Science track for the Physics major.

### Auxiliary ( 15.000 credits )

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 250 - Discrete Structures I	4 cr.
MATH 350 - Discrete Structures II	3 cr.

### Requirements for the Major, B.S. in Computer Science 3/2 Program (five-year program):

CSIS 120 - Intro to Programming	4 cr.
CSIS 210 - Data Structures	3 cr.
CSIS 220 - Assembly Lang and Comp Architecture	4 cr.
CSIS 225 - Object-Oriented Des and Prog	3 cr.
CSIS 385 - Analysis of Algorithms	3 cr.
CSIS 410 - Software Engineering I	3 cr.
CSIS 415 - Software Engineering II	3 cr.

CSIS 110 - Intro to Computer Science	<b>AND</b>	3 cr.
3 additional courses between CSIS 310 and 499		9 cr.
	<b>OR</b>	
4 additional CSIS electives between 310 and 499		12 cr.

Note: CSIS 251 and 351 may not be applied toward the required CSIS credits in Computer Science

**Auxiliary ( 15.000 credits )**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 250 - Discrete Structures I	4 cr.
MATH 350 - Discrete Structures II	3 cr.

Students spend the first 3 years at Siena and the last 2 at one of the following cooperating institutions: Catholic University, Rensselaer Polytechnic Institute, Clarkson University, Manhattan College, or SUNY Binghamton.

Students earn a B.S. degree in Computer Science from Siena as well as a B.S. in Engineering from the chosen institution.

**Requirements for the Computer Science Certificate (20.000 credits):**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	4 cr.
CSIS 210 - Data Structures	3 cr.
CSIS 220 - Assembly Lang and Comp Archtcr	4 cr.
CSIS 225 - Object-Oriented Des and Prog	3 cr.
CSIS 385 - Analysis of Algorithms	3 cr.

**Auxiliary (12.000 credits)**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 250 - Discrete Structures I	4 cr.

**Requirements for the Information Systems Certificate (29.000 credits):**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 112 - Database Design and App for Bus	3 cr.
CSIS 114 - Management Information Systems	3 cr.
CSIS 116 - Survey of Info Technology	3 cr.
CSIS 120 - Intro to Programming	4 cr.
CSIS 210 - Data Structures	3 cr.

MATH 371 - Probability for Statistics	<b>OR</b>	
QBUS 200 - Business Statistics I		4 cr.

Any two of the following:

CSIS 200 - Topics in Computer Science (when appropriate)	
CSIS 201 - Topics Computer Science with Lab (when appropriate)	
CSIS 220 - Assembly Lang and Comp Archtcr	
CSIS 225 - Object-Oriented Des and Prog	
CSIS 350 - Data Base Management	
CSIS 400 - Adv Topics in Computer Science (when appropriate)	
CSIS 401 - Adv Topic in Comp Science with Lab (when appropriate)	
CSIS 410 - Software Engineering I	
CSIS 415 - Software Engineering II	6 cr.

The Computer Science program is based on the suggested curriculum of the SIGCSE (Special Interest Group Computer Science Education) of the ACM (Association for Computing Machinery).

Facilities: The Computer Science Department has its own networked computing facility for laboratory work using Linux servers, Macs, Windows PCs and a variety of other hardware and software. There are 4 instructional labs and one open lab, with over 100 PCs managed by five servers with several terabytes of disk space. The department also has specialized equipment for robotics and computer architecture. Students also access Siena's

campus-wide academic computing network. (See the “Information Technology Services” section of the catalog for a complete description of the Academic Computing facilities).

In addition to the College’s standard software, students have access to several programming languages including Python, Alice, C, C++, Scheme, Java, Visual Basic, Prolog, Visual C++, PHP and Perl. Additional software available for use in courses and on student projects includes the Statistical Package for the Social Sciences (SPSSX), Oracle, SQL Server, MySQL, various Computer Aided Software Engineering (CASE) tools, Macromedia Studio, SmartDraw and Mathematica.

**Requirements for the Minor, Computer Science (18.000 credits):**

CSIS 210 - Data Structures	3 cr.
At least two additional courses at the CSIS 120 level or above	6 cr.
Computer Science Electives	9 cr.

**Requirements for the Minor, Information Systems (18.000 credits):**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Introduction to Programming	4 cr.
CSIS 114 - Management Information Systems	3 cr.
CSIS 116 - Survey of Information Technology <b>OR</b>	
CSIS 180 - Web Design	3 cr.
CSIS 115 - Database Design and App for Bus <b>OR</b>	
CSIS 350 - Data Base Management	3 cr.
ACCT 470 – Accounting Systems and Data Processing <b>OR</b>	
CSIS 010 Introduction to Computer Applications <b>OR</b>	
Any two additional CSIS credits	2 Cr.

**Description of Courses**

CSIS—SSX. Spreadsheet Exam 0 credits  
 This course will be awarded to School of Business students passing the department’s spreadsheet exam during orientation. No registration is required. This is one of three ways to satisfy the School of Business spreadsheet requirement; the others are completion of CSIS–010 or CSIS–011. Similarly, this serves as one possible prerequisite to certain CSIS and Business courses, but CSIS–010 or CSIS–011 can be used instead.

CSIS—010. Introduction to Computer Applications (2 hours lecture, 2 hours laboratory) 3 credits  
 This course is an introduction to digital technology with the goal of laying a technical foundation upon which societal, professional, and personal issues related to computing technology can be understood and evaluated. Topics include hardware, software, data communications, security, data representation, data storage systems, and networking. This course includes hands-on use of common business software tools emphasizing spreadsheet skills, and including word processing and presentation software. Computer Science majors cannot apply this course to the major. Lab fee. (ATTR: ARTS, REC)

CSIS—011. Problem Solving with Spreadsheets 1 credit  
 A lab-based introduction to problems, problem-solving, and the kinds of problems amenable to spreadsheet solutions. Provides a foundation for analyzing business and decision support problems using spreadsheet technology. Typical techniques studied may include absolute and relative addressing, macros, and conditionals. Students will be expected to apply their skills to various business scenarios and cases. May not be taken concurrently with or subsequent to CSIS–010. No prerequisites. Lab fee.

CSIS—013. Computer Ethics 1 credit  
 This course is a survey of the ethical issues involved in computing. Topics studied will include data access, privacy, security, hacking, copyright and intellectual property issues, email, etc. The focus will be on identifying and analyzing ethical problems related to computing, as well as on ways to foster ethical decision-making in computing-centered situations. No prerequisites.

CSIS—019. Computer Science Seminar 1 credit

This course will be offered with emphasis on different topics. The content will be designated by subtitle. Students may take the course more than once with different content. Potential topics include: History of Computing, Computing and Film, Information Presentation, etc. No prerequisites.

CSIS—030. Introduction to Computing with SPSS 3 credits

An introduction to the Statistical Package for the Social Sciences, a step by step instruction of the procedures used and an understanding of the printed output. Data preparation for the input of variables, format statements, system and program output, correlation coefficients, data plots, chi-square and distribution tests, analysis of variance and covariance are some of the subjects studied. Prerequisite: ATDV—110 or QBUS—200 or permission of instructor. Computer Science majors may not apply this course to the major but may take it only as computer science elective credit. Computer use fee. (ATTR: ARTS)

CSIS—110. Introduction to Computer Science (2 hours lecture, 2 hours laboratory) 3 credits

This course is a broad introduction to a variety of fundamental topics in computer science through a contemporary theme such as robotics, the web, graphics, or gaming. Students will consider problems in the application area that can be solved with software. Using the theme of the course, students will be introduced to important areas of computer science including abstraction, computer organization, representation of information, history of computing, ethics, and the development and evaluation of algorithmic solutions using an appropriate programming environment. Themes may differ across sections. Lab fee. (ATTR: ARTS, CAQ, CDQ, REC)

CSIS—114. Management Information Systems (2 hours lecture, 2 hours laboratory) 3 credits

An introduction to fundamental management issues and information system principles involved in the analysis, design, and implementation of management information systems. Topics include business information system planning, technology architecture, database design, systems development, decision support systems, internal control, and computer security and disaster planning. In order to provide an opportunity for students to develop a facility for applying the knowledge gained in the course, case studies will be used extensively. Prerequisite: CSIS—010 or CSIS—011 or CSIS—SSX. Lab fee. (ATTR: ARTS)

CSIS—115. Database Design and Applications for Business 3 credits

This course introduces the concepts and practices of database design and use from a business perspective. Topics to be covered include data models (object, entity-relationship, and relational, for example), database design techniques, data dictionaries, query language (e.g. SQL, QBE), requirements analysis, legacy systems, databases for decision support, presentation techniques (forms, web pages, etc.) and basic information on database use in a business setting. The course includes hands-on use of a common business database management system to illustrate and emphasize the concepts. Prerequisite: CSIS—114. Computer use fee. (ATTR: ARTS)

CSIS—116. Survey of Information Technology (2 hours lecture, 2 hours laboratory) 3 credits

This course completes the Management Information Systems sequence. Students will continue their study of programming and databases, while gaining hands-on experience in the application of these skills in a management setting. Topics may include electronic commerce, decision support systems, executive information systems, and other current aspects of information technology. Prerequisites: either CSIS—115 or CSIS—350. Lab fee. (ATTR: ARTS)

CSIS—120. Introduction to Programming (3 hours lecture, 2 hours laboratory) 4 credits

An introduction to the object-oriented design paradigm with an emphasis on problem solving, algorithm development, and implementation of algorithms in computer programs in an object-oriented language, such as JAVA or C++. Other topics will include hardware organization, data representation, system software, programming style, program testing and analysis of algorithms. Prerequisite: CSIS—110. Lab fee. (ATTR: ARTS, CAQ, CDQ)

CSIS—180. Web Design (2 hours lecture and 2 hours lab) 3 credits

Web Design is a hands-on laboratory based course covering the design and implementation of websites using markup languages, style sheets, and various software tools and applications. Lecture will cover the history and development of the Internet, the World Wide Web, and the core technologies used to implement modern websites. Students will learn about the importance of semantic markup, language standardization, and separation of content and appearance. The course will focus on web interface design using forms, techniques for integrating a wide range of media formats, and design fundamentals needed in implementing effective, user-friendly websites. Prerequisite: None. Lab fee. (ATTR: ARTS, MUMD)

CSIS—200. Topics in Computer Science 3 credits

This course will use an area of research, theory or practice to apply and extend basic principles of Computer Science. The course may be taken more than once with different topics. Possible topics include web design, emerging programming languages, computer graphics, computer security, and e-commerce. Prerequisite: permission of the instructor. (ATTR: ARTS, REC)

CSIS—201. Topics in Computer Science with Laboratory (2 hours lecture, 2 hours laboratory) 3 credits

This course will use an area of research, theory or practice to apply and extend basic principles of Computer Science. The course may be taken more than once with different topics. Possible topics include web design, emerging programming languages, computer graphics, computer security, and e-commerce. The laboratory includes such things as hands-on exploration and experimentation with concepts, software tools, computer systems, or computer languages designed to confirm or extend the principles developed in lecture. Prerequisite: permission of the instructor. Laboratory fee. (ATTR: ARTS)

CSIS—210. Data Structures (2 hours lecture, 2 hours laboratory) 3 credits

This course continues the study of algorithm design and implementation with an emphasis on the use and implementation of data structures such as records, stacks, queues, linked lists, trees and graphs. Students will continue development of programming skills using modular and structured programming techniques in a programming language. Prerequisite: CSIS—120. Lab fee. (ATTR: ARTS)

CSIS—220. Assembly Language and Computer Architecture (3 hours lecture, 2 hours laboratory) 4 credits

An introduction to assembly language programming using a specific assembly language (for example, VAX, Intel, or MIPS assembly language). Addressing techniques, internal computer components, machine language, subroutines, and parameter passing will be discussed. The course also covers topics in computer architecture including memory systems organization, interfacing and communication, functional organization, and multiprocessing architectures. Prerequisite: CSIS—120. Lab fee. (ATTR: ARTS, CFN, ISCE)

CSIS—225. Object-Oriented Design and Programming (2 hours lecture, 2 hours laboratory) 3 credits

This course continues previous work in using an object-oriented language in problem solving, and will consist of two parallel strands: the development of students' expertise in advanced features of the language, and the introduction of object-oriented design methodologies. The two strands will be developed in the context of a large-scale semester project implemented by teams of from three to six students. Prerequisite: CSIS—210. Lab fee. (ATTR: ARTS, ISCE)

CSIS—251. Discrete Structures I (Lecture and Laboratory) 4 credits

This course includes a study of mathematical structures most frequently encountered in Computer Science. Topics covered include sets, functions, mathematical induction, complexity analysis of algorithms, counting methods including probability, recurrence relations, graphs, trees, Boolean logic, and relations. Proofs using mathematical induction will be emphasized. Other proof techniques will be developed. Three hours of lecture and 80 minutes of lab each week. Prerequisites: MATH—120, CSIS—120. Offered Fall Semester. Cross-listed as MATH—250. (ATTR: ARTS)

CSIS—310. Numerical Methods 3 credits

Course objectives are to survey and develop numerical methods for solving scientific problems. Topics covered are roots of linear and nonlinear systems, numerical integration, approximation, interpolation, and ordinary differential equations. The course will emphasize efficient computer implementation of numerical algorithms. Prerequisites: CSIS—120 and MATH—120. Computer use fee. (ATTR: ARTS)

\*\*\*CSIS—325. Computer Organization 3 credits

This course provides a foundation in computer hardware organization including: a brief survey of historical developments in computer hardware, a contrast of computer architectures and their implementation, and numbering systems. Also covered are fundamentals of logic design with application to the design of basic computer elements such as counters, adders, decoders, design of instruction timing sequences, register structure, addressing techniques and microcomputers. Prerequisites: CSIS—220, PHYS—070 and PHYS—240. (ATTR: ARTS)

CSIS—330. Operating Systems (3 hours lecture, 3 hours laboratory) 4 credits

A study of processor, memory, device, and information management of contemporary computer systems. Emphasis is placed on the models and algorithms for multi-programming computer operating systems.

Discussion will include classic problems such as the concurrency problems of mutual exclusion, deadlock and synchronization, and memory management concepts such as paging, working set and segmentation. The laboratory includes an introduction to using the UNIX operating system, an introduction to programming in the C language and experiments designed to confirm or extend the principles developed in lecture. Prerequisite: CSIS—210. Lab fee. (ATTR: ARTS)

**CSIS—340. Programming Languages 3 credits**

A study of the organization and structure of modern programming language paradigms with an emphasis on semantic issues. Topics include formal language theory, syntax, semantics, calling protocols, and conventional and abstract data types. This course will include comparison studies of languages such as LISP, C, Ada, Prolog, C++, Pascal, FORTRAN, and APL. Prerequisite: CSIS—225. Computer use fee. (ATTR: ARTS)

**CSIS—350. Data Base Management 3 credits**

A hands-on study of Data Base Management Systems, based on the entity-relationship and relational data models. Topics will include logical and physical database design (including E/R modeling, normalization, memory management, and indexing), transactions/concurrency, query processing/optimization algorithms, and query languages (primarily relational algebra and SQL). Problems such as security and integrity of the data will also be discussed. Additional topics may include recovery, object-relational extensions, semistructured data and languages (e.g. XML/Xquery), application development (e.g. PL/SQL, PHP), or distributed systems. Prerequisite: CSIS—210. Computer use fee. (ATTR: ARTS, ISCE)

**CSIS—351. Discrete Structures II 3 credits**

This course is a continuation of the study of mathematical structures most frequently encountered in Computer Science. Topics covered include deterministic and non-deterministic finite automata, regular, context-free and other languages, push-down automata, grammars, Turing machines, computational complexity, and in particular the P vs. NP problem. Prerequisites: MATH—250 or CSIS—251. Offered in Spring Semester. Cross-listed as MATH—350. (ATTR: ARTS, MHUL)

**CSIS—355. Advanced Database 3 credits**

This course has two major themes:(1) An introduction to the principles of database management system implementation (as opposed to use), with an emphasis on current relational implementation technology; and (2) a study of the emerging Object-Oriented database technology from the standpoint of a database user/administrator. Topics in both themes will include query processing, concurrency control, language design, data modeling, and distributed systems. Prerequisite: CSIS—350 or instructor permission. Computer use fee. (ATTR: ARTS)

**CSIS—365. Communications & Networks 3 credits**

A survey of data communication and networks. Topics to be covered include techniques of transmission, protocols for line control, error detection and correction, communication software, various types of network systems, distributed applications, and performance evaluation. Prerequisite: CSIS—220. (ATTR: ARTS)

**CSIS—375. Introduction to Artificial Intelligence 3 credits**

Fundamental concepts used in machine implementation of processes which imitate human cognition. Topics include knowledge representation, logical deduction and problem solving, natural language understanding and semantic representation. Current literature and research will be discussed. Students will complete several programming projects in the areas of game trees, backtracking, theorem proving, and rule-based systems. Pre- or co-requisite: CSIS—210. Computer use fee. (ATTR: ARTS)

**CSIS—380. Computer Graphics (2 hours lecture and 2 hours laboratory) 3 credits**

This course is an introduction to the mathematical and algorithmic principles of computer graphics as well as graphical applications programming. Topics covered include two and three-dimensional transformations, three-dimensional viewing, shading models, curves and surfaces, ray tracing, texture mapping, and algorithmic issues. In the laboratory these topics will be explored using graphics software tools and through programming using graphics libraries. Standard lab fee (2 hrs); no computer use fee. Prerequisites: CSIS—210 and MATH—120. (ATTR: ARTS, CMLS, LCSL)

**CSIS—385. Analysis of Algorithms 3 credits**

This course continues previous work in the design and analysis of algorithms. Data structures considered may include, for example, binary trees, AVL trees, B-trees, hash tables, and multi-dimensional trees. Algorithms for searching, inserting into, and deleting from these structures will be discussed. A variety of sorting algorithms (possibly including radix sort, heapsort, mergesort and quicksort) will be studied. Algorithms for other

problems such as k-selection, minimum cost spanning trees, connectivity, and shortest paths will be analyzed. NP-complete problems will be introduced. Prerequisites: CSIS—210, MATH—250. (ATTR: ARTS)

CSIS—390. Web Application Development (2 hours lecture and 2 hours laboratory) 3 credits  
Web Application Development is a hands-on laboratory based course covering the design and implementation of dynamic websites and web-based applications. Topics include web server and web application architecture, database-driven website development, web interface design, web content management, and web security issues. Students will study the principles of extensibility, accessibility, and standardization and how they relate to the design of modern websites and web-based applications. Prerequisite: CSIS—210. Lab fee. (ATTR: ARTS)

CSIS—400. Advanced Topics in Computer Science 3 credits  
This course will use an areas of research, theory or practice to apply and extend basic principles of Computer Science. The course may be taken more than once with different topics. Possible topics include: web design, computer graphics, system administration, advanced AI, computer security, systems programming, cryptography, data warehousing, etc. Prerequisite: permission of the instructor. (ATTR: ARTS)

CSIS—401. Advanced Topics in Computer Science with Laboratory (2 hours lecture, 2 hours laboratory) 3 credits  
This course will use an area of research, theory or practice to apply and extend basic principles of Computer Science. The course may be taken more than once with different topics. Possible topics include computer graphics, systems administration, Advanced AI, Systems Programming, Computer Security, Data Warehousing, or Cryptography. The laboratory includes such things as hands-on exploration and experimentation with concepts, software tools, computer systems, or languages designed to confirm or extend the principles developed in lecture. Prerequisite: Permission of the instructor. NOTE: The lab fee will be calculated using the standard lab fee formula with two hours. Because there is a lab fee, the computer use fee will be eliminated. (ATTR: ARTS)

CSIS—410. Software Engineering I (2 hours lecture, 2 hours laboratory) 3 credits  
Introduces the concepts of structured system analysis. Presents principles of software engineering including techniques for planning, specification, and system design. Specifications for an actual system will be developed. Prerequisite: CSIS—225. Requires senior class standing or permission of instructor. Lab fee. (ATTR: ARTS, ISCE)

CSIS—415. Software Engineering II (2 hours lecture, 2 hours laboratory) 3 credits  
Implementation of a software engineering methodology. Complete design, testing, and verification of a system developed using a programming team concept. Structured design and documentation. Prerequisite: CSIS—410. Computer use fee. Lab fee. (ATTR: ARTS, ISCE)

CSIS—499. Independent Study 1 - 3 credits  
A qualified student, with the consent of the Head of the Computer Science Department, may pursue further research and study in some specific aspect of computer science. The student will be directed by a member of the Computer Science Department with whom he/she will hold periodic discussion. The student will be expected to comply with all School of Science guidelines concerning such projects. The number of credits to be awarded (1 - 3) will be determined by the Head of the Computer Science Department and the directing faculty member. Computer use fee. This course is arranged by mutual consent of the faculty member and student. (ATTR: ARTS)

## **Environmental Studies Department**

Chair: Dr. Jean C. Mangun, Prof.

Prof.: Dr. James Booker (ES & Economics), Dr. J. Gerard Dollar (ES & English), Dr. Jennifer McErlean (ES & Philosophy), Dr. Lawrence L. Woolbright (ES & Biology)

Assoc. Prof.: Dr. Mathew Johnson (ES & Sociology)

Asst. Prof.: Dr. Mary Beth Kolozsvary (ES), Dr. Katherine Meierdiercks (ES)

Environmental Studies and Sciences exemplify one of the deepest traditions in Liberal Arts, the tradition of interdisciplinary inquiry.

A major in Environmental Studies or Environmental Science can be preparation for employment in fields related to environmental policy, interpretation, planning and management, monitoring, or restoration. Students with a continuing commitment to environmental interests can choose to continue their studies at the graduate level, pursuing advanced degrees in fields including: environmental studies or sciences; environmental law; environmental journalism; sustainability; and conservation or energy systems science. Two interdisciplinary degree tracks are offered leading either to a B.A. in Environmental Studies or a B.S. in Environmental Science.

Certain graduate programs or technical jobs may require additional coursework beyond the majors in Environmental Studies or Environmental Science. The ES majors combine well with a variety of other curricula in the College, and many of our students pursue a minor. Likewise, students of other majors may benefit from pursuing the ES minor (see below). For example, combining a major in Environmental Science with a minor in Physics can make students eligible for the 4+1 Union Graduate College Engineering Program M.S. in Energy Systems (as listed in the Affiliation/Articulation Agreements section of the Catalog). All ES students work closely with their academic adviser to choose a plan of study appropriate to their post-graduate plans.

**Requirements for the Major, B.A. in Environmental Studies ( 38.000 credits )**

ENVA 100 - Environmental Science	4 cr.
ENVA 120 - Environmental Ethics	3 cr.
ENVA 140 - Environment and Society (also SOCI 160)	3 cr.
ENVA 205 - Environmental Field Techniques	2 cr.
ENVA 210 - Environmental Research Methods	2 cr.
ENVA 250/BIOL 255 - Ecology	3 cr.
ENVA 460 - GIS: Environmental Applications	3 cr.
ENVA 300/ECON 340 - Environmental Economics	3 cr.
ENVA 390 - Environmental Policy & Management	3 cr.

Arts & Humanities Block: BA students must successfully complete 2 courses from the following: ENVA 305, ENVA 310 (POSC 360), ENVA 315 (POSC 355), ENVA 320 (PHIL 320), ENVA 220 (ENGL 220), ENVA 230 (RELG 270). (At least one course must be at 300-level). 6 cr.

**AND**

Environmental Applications Block: BA students must successfully complete a minimum of 2 courses from the following: ENVA 400, ENVA 420, ENVA 430, ENVA 440. (ENVA 400 can be taken multiple times with different content). 6 cr.

**Auxiliary ( 20.000 credits )**

BIOL 110 - General Biology I	4 cr.
BIOL 120 - General Biology II	4 cr.
CHEM 025 - Concepts of Environmental Chemistry	<b>OR</b>
PHYS 055 - Energy and Environment	3 cr.
ECON 101 - Principles of Economics, Micro	3 cr.
ATDV 110 - Statistics for Social Science	<b>OR</b>
QBUS 200 - Business Statistics I	<b>OR</b>
MATH 060 - Environmental Math I	4 cr.
Internship	3 cr.
ATDV 480 - Internship in Arts Division	<b>OR</b>
SCDV 480 - Internship in Science	

**Requirements for the Major, B.S. Environmental Science ( 39.000 credits )**

ENVA 100 - Environmental Science	4 cr.
ENVA 120 - Environmental Ethics	3 cr.
ENVA 140 (SOCI 160) - Environment and Society	3 cr.
ENVA 205 - Environmental Field Techniques	2 cr.
ENVA 210 - Environmental Research Methods	2 cr.
ENVA 250 (BIOL 225) - Ecology	3 cr.
ENVA 460 - GIS: Environmental Applications	3 cr.
ENVA 290 (CHEM 230) - Environmental Chemistry	4 cr.
ENVA 450 (BIOL 465) - Conservation Biology	3 cr.
ENVA 300 (ECON 340) - Environmental Economics	<b>OR</b>
ENVA 390 - Environmental Policy & Management	3 cr.

B.S. Students must complete 3 additional courses from the following: 9 cr.

ENVA 400 – Advanced Topics in Environmental Studies (Adv. GIS)  
 ENVA 400 - Rivers and Watershed Management  
 ENVA 420 - Wildlife Conservation Forests  
 ENVA 430 - The Adirondack Environment  
 ENVA 499 - Independent Study-Environmental Studies

(ENVA 400 can be taken more than once with a different topic.)

**Auxiliary ( 31.00 credits )**

BIOL 110 - General Biology I	4 cr.
BIOL 120 - General Biology II	4 cr.
CHEM 110 - General Chemistry I	4 cr.
CHEM 120 - General Chemistry II	4 cr.
CHEM 210 - Organic Chemistry I	4 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
SCDV 480 - Internship in Science	3 cr.

**Requirements for the Minor, Environmental Studies (18.000 credits):**

ENVA 100 - Environmental Science	4 cr.
ENVA 120 - Environmental Ethics	3 cr.
ENVA 140 - Environmental and Society	3 cr.

Environmental Studies Electives (Three Courses)	8 cr.
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**Description of Courses**

ENVA—010. Environmental Issues 1-3 credits

A facilitated discussion of topics and disciplines needed to frame environmental issues from multiple perspectives. Topics covered can vary between semesters but will include issues such as career preparation, sustainability and food production, resource conservation, water quality, air pollution, alternative energy and climate change. (ATTR: ARTS)

ENVA—015. Principles of Ecology 3 credits

A study of the structure and function of nature with special emphasis on the impact of humans on natural systems. Topics included will be energy flow, nutrient cycles, population dynamics, and community ecology. Not open to Biology majors. (ATTR: ARTS, CAN, CFN)

ENVA—020. Biological Diversity 3 credits

Why should we conserve biological diversity? An informed answer requires a basic understanding of the diversity of living organisms and the processes affecting this diversity. This class explores the classification of living organisms, their intrinsic value, and strategies for their conservation. Students will be asked to make connections between unsustainable human activities and species loss through critical discourse and collaborative projects that apply principles of modern conservation biology. Not open to Biology majors. (ATTR: ARTS, CAN, CFN)

ENVA—100. Environmental Science (3 hours lecture, 3 hours laboratory) 4 credits

This course is designed to introduce students to the basic scientific methods, tools and techniques needed to understand and analyze environmental issues. Topics covered include ecosystem structure and function, population dynamics and regulation, resources and resource management, and pollution. The laboratory will include projects dealing with current environmental issues, and will emphasize hypothesis testing, data collection and analysis, and oral and written presentations. Several field trips (including one weekend trip) will introduce students to local ecosystems and to local environmental issues. Lab fee. (ATTR: ARTS, CAN, CDN)

ENVA—120. Environmental Ethics 3 credits

This humanities-based course may draw upon material from philosophy, the sciences, literature, religious studies, history and the various arts to encourage broad reflection about our obligations to the environment. One aim is to introduce students to the basic ethical views (utilitarian, rights theory, socialist accounts) that inform environmental decision making. Another aim is to examine more recent work specific to the environment, such as essays on “deep ecology,” “the land ethic,” “environmental racism,” and “ecofeminism.” (ATTR: ARTS, FSES)

ENVA—140. Environment and Society 3 credits

An introduction to the social aspects of environmental problems and solutions. It examines the ways in which social institutions and lifestyles lead to environmental deterioration. It also looks at the consequences of environmental decay for human health and well-being. It examines efforts to preserve the natural environment through the Environmental Movement, drives to save particular ecosystems, and changes in thinking about environmental issues. (Same as SOCI—160.) (ATTR: ARTS)

ENVA—150. Earth Science 3 credits

The major themes of Earth Science are (1) the geographic location and global distribution of natural earth phenomena, (2) the origin and interpretation of these phenomena within the framework of a hierarchy of interacting physical systems and mechanisms, and (3) the impact of past and present human activities on the natural balance of these systems and mechanisms. Topics include climate and weather; atmospheric, surface, and subsurface water; soils and soil processes; natural vegetation; landforms; and diastrophic, fluvial and erosional processes. (ATTR: ARTS, CAN, CDN)

ENVA—205. Environmental Field Techniques 2 credits

Collecting accurate and representative field data is essential for many environmental investigations and research projects. In this course, students learn the theory of and techniques for field data collection, analysis and interpretation. Topics include making streamflow measurements, air quality sampling, conducting bird surveys, and using GPS. Students will design and conduct individual and group field projects. Prerequisite: ENVA—100. (ATTR: ARTS)

ENVA—210. Environmental Research Methods 2 credits

In this course, methods to identify, analyze, and solve real-world environmental problems are introduced. Qualitative and quantitative interdisciplinary research tools are used to address a wide variety of environmental issues. Emphasis is placed on basic tools for environmental modeling, statistical analysis, scientific writing and the graphical presentation of data. Students will evaluate current environmental literature, develop practical research skills, and formulate approaches to scholarly research. Each student will complete an environmental research project and prepare a scholarly paper. Prerequisite: ENVA—100. (ATTR: ARTS)

ENVA—220. Literature and the Environment 3 credits

This course introduces students to the tradition of nature writing in literature, with an emphasis on American authors. Thoreau's *Walden* is a central text. Particular attention is given to contemporary multicultural voices among environmental writers. The course emphasizes nonfiction prose but includes some poetry and fiction. (Same as ENGL—220.) (ATTR: ARTS, ENUL, LTTP)

ENVA—230. Religion and the Environment 3 credits

An examination of the stances and attitudes toward nature and the environment taken by several religious communities. The course will assist students to develop a constructive assessment of the theological and ethical contributions religious communities can make to environmental studies. (Same as RELG—270.) (ATTR: ARTS, CAR, CFN, RSET)

ENVA—250. Ecology (2 hours lecture, 4 hours laboratory) 3 credits

A study of the interrelations of organisms with each other and the environment. The lectures are equally divided between ecosystem ecology (energy and material flux, modeling), population ecology (population dynamics, competition, predation) and community ecology (structure, diversity, and succession). The lab will emphasize methodology with weekly field trips to various local habitats. One weekend field trip to the Adirondack mountains is required. Prerequisites: 120 or permission of the instructor. (Same as BIOL—225.) Lab fee. (ATTR: ARTS, CFN)

\*ENVA—290. Environmental Chemistry (3 hours lecture, 4 hours laboratory) 4 credits

An introduction to the chemical processes that occur in water, air, and soil, and the effects of pollutants on these processes. Consumption of and reliance on limited natural resources will be studied, along with emerging alternative energy sources. The laboratory will emphasize environmental sample collection and preparation, and analysis of these samples by both wet chemical methods and instrumental analysis. Three hours of lecture and four hours of laboratory each week. (Same as CHEM—230.) Lab fee. (ATTR: ARTS)

ENVA—300. Environmental Economics 3 credits

An examination of how the natural environment is affected by the economic activities of society, and the physical and biological limitations imposed on the economy by the natural environment. Particular areas

examined include the use of non-renewable natural resources, market failures, economic methods for analyzing pollution, cost/benefit analysis, the impact of population growth, and the values implicit in free market economies toward the natural environment. (Same as ECON—340.) Prerequisite: ECON—101. (ATTR: ARTS)

ENVA—305 Intermediate Topics in Environmental Studies 3 credits

This course will explore, at an intermediate level, special topics in environmental studies not covered in regular course offerings. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with different content. Prerequisites: ENVA—100, ENVA – 140, and in most cases additional prerequisites that will vary depending on the topic given – see schedule of classes. (ATTR: ARTS)

\*ENVA—310. Environmental Politics 3 credits

A study of environmental public policy: the major actors, institutions, and rules of the game that shape decision making. We will also engage in a dialogue about the underlying philosophies that drive resource utilization and environmental preservation. We will primarily look at the case of the United States, but some attention will be given to the international dimensions of the subject. Prerequisites: POSC—100 or Junior standing. (Same as POSC—360.) (ATTR: ARTS)

\*ENVA—315. Global Environmental Dilemmas 3 credits

This course studies how national, subnational and transnational actors create and actuate norms, principles, treaties and institutions for dealing with global environmental issues. Prerequisites: POSC—150 or junior standing. (Same as POSC—355.) (ATTR: ARTS, ISP)

\*ENVA—320. Philosophy of Nature 3 credits

Examination of the idea of nature in historical and contemporary perspective, including theories of humanity's place in and transformation of the natural world. Some points of emphasis are the legacy of ancient cosmology, the development of the scientific view of nature, modern technology, and current ecological theory. Prerequisite: PHIL—101. (Same as PHIL—320). (ATTR: ARTS, CAP,CFN)

ENVA—390. Environmental Policy and Management 3 credits

This course introduces the student to environmental policy processes and issues from economic, management, political science and sociological perspectives. It presents various methods for evaluating environmental quality and remedies; it looks at the various actors (federal/ state/local governments, communities, grassroots organizations, etc.) involved in environmental decision-making; and it examines the challenges of implementing environmental policy. Prerequisites: ENVA—100, 120 and 140. (ATTR: ARTS)

ENVA—400. Advanced Topics in Environmental Studies 1-3 credits

This course will explore, at an advanced level, special topics in Environmental Studies that are not part of the regular course offerings. Topics will be announced during pre-registration in the preceding semester. This course may be taken more than once with a different content. Prerequisites: ENVA—205, ENVA—210, and in most cases additional prerequisites that will vary depending on the topic given – see schedule of classes. (ATTR: ARTS)

ENVA—410. Practicum in Environmental Studies 1 credit

This class is a hands-on group project, directed by a faculty member, in some applied aspect of environmental studies. Examples of projects that could be included under this rubric are environmental restoration or wetlands creation projects, natural resource inventories, and other interpretive or conservation projects requiring group effort. Class will meet for one hour each week, and students are expected to spend a minimum of an additional three hours per week working on the project. May be taken more than once under different subtitles. Prerequisites: ENVA—205 and ENVA—210. (ATTR: ARTS)

ENVA—420. Wildlife Conservation in Forested Ecosystems 3 credits

An introduction to issues and applications of wildlife conservation strategies in forested ecosystems of the eastern United States. We examine the interrelationships between changing land-use patterns, forest management practices and wildlife population dynamics. Emphasis is placed on identification of common woodland birds and mammals as well as habitat management options for restoration and maintenance of biological diversity. At least one Saturday field trip is required. Prerequisites: ENVA—205 or ENVA—250 (BIOL 225). Offered Fall Semester. (ATTR: ARTS)

ENVA—430. The Adirondack Environment 3 credits

This interdisciplinary course introduces students to the geology, flora and fauna, history, literature, and environmental politics of New York's Adirondack Mountains. Following a historical survey, the course looks at

contemporary environmental policy issues: acid rain, second home development, invasive species, over-use of popular areas, among others. The course includes either a weekend camping trip or several day trips (one of which may be service-oriented). Fee required. Prerequisites: written permission of instructor. (ATTR: ARTS)

**ENVA—440. Environmental Interpretation 3 credits**

This course is designed to introduce students to the theory and practice of interpreting ecological and aesthetic values of the natural world to the visiting public. Emphasis is placed on interpretation of natural and cultural resources and informal education in an outdoor setting. Both individually and in groups, students will plan and present interpretive materials using written, oral, and visual methods of informative and persuasive communication. At least one Saturday field trip will be required. Prerequisite: ENVA—205 and ENVA—210. (ATTR: ARTS, REC)

**\*ENVA—450. Conservation Biology (2 hours lecture, 4 hours laboratory) 3 credits**

Modern conservation biology employs an integrative approach to biodiversity protection and management using principles and experiences from ecology, natural resource management, and the social sciences. Topics include biological diversity, valuation systems, adaptation and extinction, minimum viable populations, management of invasive and endangered species, and the design of nature preserves. Lab and field problem-solving exercises focus on population size, habitat fragmentation, and restoration ecology. Prerequisite: ENVA—250 or BIOL—225. (Same as BIOL—465.) Lab fee. (ATTR:ARTS)

**ENVA—460. GIS: Environmental Applications (Lecture and Laboratory) 3 credits**

Geographic Information Systems (GIS) is a tool for viewing and analyzing spatial information. In this course, students will learn GIS fundamentals through applied projects that explore environmental issues. Topics include delineating watersheds and river networks, plotting GPS data, analyzing land-use trends over time, tracking weather systems, classifying remote sensing data, and mapping ecosystem patch structure and dynamics. Emphasis is placed on gaining hands-on experience using the ESRI ArcGIS and Google mapping environments. Students will complete an individual research project and share their research in a poster presentation. Two hours lecture and two hours laboratory. Prerequisites: ENVA—210. (ATTR: ARTS, REC)

**ENVA—499. Independent Study 1 - 3 credits**

Seniors in the Environmental Studies or Environmental Science track may pursue an independent research project in Environmental Studies, under the supervision of a faculty member. Interested students should prepare a written research proposal and solicit the consent of an instructor to serve as mentor. Written permission of the supervising instructor and the Environmental Studies Department Head is required. (ATTR: ARTS)

## **Mathematics Department**

Chair: Dr. Edwin L. Rogers, Prof.

Prof.: Dr. Emelie A. Kenney, Mr. James R. Matthews

Assoc. Prof: Dr. Jon P. Bannon, Dr. Nikolai A. Krylov, Dr. John C. O'Neill

Asst. Prof.: Dr. M. Bradley Henry, Dr. Mohammad Javaheri

Visiting Asst. Prof.: Dr. Patrick Cade

Visiting Inst.: Mr. Daniel Smitas

The Mathematics Department, following recommendations by the Committee on the Undergraduate Program in Mathematics of the Mathematical Association of America, offers its majors a basic grounding in calculus, modern algebra and real analysis. Students are introduced to the language of mathematics, learn to formulate and solve mathematical problems, and develop a facility with advanced mathematical technique and abstraction. A wide choice of elective courses allows students to pursue varied career goals. Our students are well prepared to choose graduate education, secondary teaching certification or to enter the work force directly.

For students interested in engineering, the Mathematics Department participates in a cooperative engineering program. For details, see the Special Programs section of the catalog, and the Cooperative Engineering Program requirements section below.

Students can earn college credit for either Calculus I (MATH—110) or Calculus 1 and Calculus II (MATH—120) by scoring a four or a five on the Advanced Placement (AP) examinations. Alternatively, students may earn credit for Calculus I by passing an examination given by the department each fall. Incoming students must contact the department by August 1 if they wish to sit for the examination.

**Requirements for the Major, B.A. in Mathematics (37.000 credits):**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 191 - Mathematical Problem Solving	1 cr.
MATH 210 - Calculus III	4 cr.
MATH 230 - Linear Algebra	3 cr.
MATH 301 - Foundations of Mathematics	3 cr.
MATH 310 - Intro to Modern Algebra	3 cr.
MATH 320 - Mathematical Analysis	3 cr.
Mathematics Electives	
At least three classes between Math 325 and Math 499	12 cr.

**Auxiliary (14.000 credits)**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	3 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.

**Requirements for the Major, B.S. in Mathematics (37.000 credits):**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 191 - Mathematical Problem Solving	1 cr.
MATH 210 - Calculus III	4 cr.
MATH 230 - Linear Algebra	3 cr.
MATH 301 - Foundations of Mathematics	3 cr.
MATH 310 - Intro to Modern Algebra	3 cr.
MATH 320 - Mathematical Analysis	3 cr.
Mathematics Electives	
At least three classes between Math 325 and Math 499	12 cr.

**Auxiliary (23.000 credits)**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	3 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.

Additionally, students must successfully complete the requirements for a minor or a major in biology, chemistry, physics, or computer science.

**OR**

Students must successfully complete 9 additional credits in biology, chemistry, physics, or computer science that count for the degree in that major. 9 cr.

Of these 9 credits, students must successfully complete 6 credits from one of the following sequences:

Physics 250, 310, 320, 410 or 440	<b>OR</b>
CHEM 310 and 320	<b>OR</b>
CSIS 310 and 385	

**Requirements for the Minor, Mathematics (18.000 credits):**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
Two courses from MATH 210 through MATH 470	6 cr.
Two courses from MATH 300-470	6 cr.

Education Certification: Siena mathematics majors seeking initial teaching certification (grades 7-12) must be approved by both the Mathematics Department and the Education Department. They must satisfy the requirements of one of the degrees listed above. Additionally, New York State requires that all prospective

teachers study a language other than English at the college level. To be approved for the program the student must demonstrate strong communication skills, have a minimum Grade Point Average of 2.75 in mathematics courses and overall, and successfully complete the courses Euclidean and Non-Euclidean Geometry and Probability for Statistics. Students returning to or continuing their education at Siena College for purposes of certification must meet the requirements above. The professional teaching semester in mathematics is normally offered during the Fall Semester of each year.

**Requirements for the Major, B.S. in Mathematics 3/2 Program (36.000 credits):**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 191 - Mathematical Problem Solving	1 cr.
MATH 210 - Calculus III	4 cr.
MATH 230 - Linear Algebra	3 cr.
MATH 301 - Foundations of Mathematics	3 cr.
MATH 310 - Intro to Modern Algebra	3 cr.
MATH 320 - Mathematical Analysis	3 cr.
Mathematics Electives -At least three classes between Math 325 and Math 499	12 cr.

**Auxiliary (17.000 credits)**

CSIS 110 - Intro to Computer Science	3 cr.
CSIS 120 - Intro to Programming	3 cr.
CSIS 310 - Numerical Methods	3 cr.
PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.

Additionally, students must successfully complete the requirements for a minor or a major in biology, chemistry, physics, or computer science.

**OR**

Students must successfully complete 9 additional credits in biology, chemistry, physics, or computer science that count for the degree in that major. 9 cr.

Of these 9 credits, students must successfully complete 6 credits from one of the following sequences:

Physics 250, 310, 320, 410 or 440	<b>OR</b>
CHEM 310 and 320	<b>OR</b>
CSIS 310 and 385	

**Description of Courses**

MATH—010. Finite Mathematics 3 credits

Much of the mathematics which impinges on everyday life is of the finite variety. This course will introduce students to topics from Number Theory, Combinatorics, Complexity Theory, Difference Equations, Game Theory, Geometry, Graph Theory, Information Theory, Group Theory, Logic, Probability and Simple Descriptive Statistics, and Set Theory. Preference will be given to topics which convey to the student the importance of finite mathematics in modern society, with applications which are accessible to student experimentation. Primarily intended for Liberal Arts and Business majors. Not open to students who have successfully completed MATH—110 or higher. (ATTR: ARTS, CAQ, CDQ)

MATH—030. History of Mathematics 3 credits

This is a one semester course on selected topics in the history of mathematical ideas. Topics covered may include the notions of limit, infinity, area, parallelism, pi, transcendental numbers, number systems, mensuration, polynomials, cosmology, map coloring, logic, proof, abstraction, generalization, quadrature, trisection, or algebraic structure. The history of a given idea will be traced, and relevant problems will be presented. This course is intended for students in all schools of the College. Mathematics majors may take the class for elective credit but it does not count towards the requirements for the major. Offered spring semester. (ATTR: ARTS, CAQ, CDQ)

MATH—050. Preparation for Calculus 3 credits

A study of the background material needed for calculus with emphasis on functions. The course includes a study of relations, functions and graphs, polynomials, solving equations and inequalities, rational and radical functions, logarithmic and exponential functions, trigonometric functions both right angle and analytic, vectors, polar and parametric equations, and an introduction to the conic sections. Students must purchase an approved graphing calculator prior to beginning this course. (ATTR: ARTS)

**MATH—060. Environmental Math I 3 credits**

An introduction to some of the important issues in environmental science coupled with the basic mathematical ideas, tools, and techniques necessary to grapple with them. Scientific topics may include climate change, fuel economy, X-ray detectability of lung cancer cell clusters, biodiversity, fertility rates in developing countries, and spread of tropical diseases to new populations. To address these issues, measurement, parts per billion and other ratios, histograms, functions, and regression, as well as other mathematical topics, will be considered. Each mathematical idea will be illustrated immediately with an environmental application. No prerequisites. (ATTR: ARTS, CAQ)

**MATH—070. Environmental Math II 3 credits**

A continuation of MATH—060, Environmental Mathematics I. While still easily accessible to the typical student, slightly more advanced mathematical topics are introduced, including linear functions and regression, exponential and power functions, growth models, periodic behavior, chaotic behavior, and systems of difference equations. These ideas will be illustrated by scientific topics that may include, broadly, earthquake models, resource sustainability, pollution, energy, and hazardous household waste. Specific examples include meat consumption in China, thinning of glaciers, mercury in dental fillings and in compact 5 fluorescent light bulbs, and e-waste, such as leachable lead in discarded cathode ray tubes. Prerequisites: Successful completion of MATH—060 Environmental Mathematics I is required for students who have not taken non-core college mathematics courses. Those students who have taken such courses but have not taken MATH—060 may take MATH—070 by permission of the instructor. (ATTR: ARTS, CAQ)

**MATH—100. Journey into Mathematics 3 credits**

This is an intensive exploration of some great ideas of mathematics. We ask and try to answer questions like: “Can we count the real numbers?”; “What is the fourth dimension?”, “How can an infinitely long curve exist in a finite space?”. This course is a challenging one, suitable for students who have an above average high school record. Prerequisites. Permission of the instructor required. (CORE: CAQ, HNRS)

**MATH—110. Calculus I (Lecture and Laboratory) 4 credits**

Courses MATH—110, 120 and 210 provide a foundation for all upper level mathematics courses. Main topics considered during the first semester: functions, limits, continuity, differentiation, the chain rule, antiderivatives, the definite integral, Fundamental Theorem of Calculus and trigonometric functions. Applications of all topics are emphasized. Three hours of lecture and one hour and twenty minutes of laboratory per week. Lab fee. Students must purchase an approved graphing calculator prior to beginning this course. (ATTR: ARTS, CAQ, CDQ)

**MATH—120. Calculus II (Lecture and Laboratory) 4 credits**

This course completes the calculus of elementary transcendental functions. It also includes techniques of integration, indeterminate forms, L'Hospital's Rule, improper integrals, and introduction to sequences, infinite series and power series. Students apply concepts to work, volume, arc length, and other physical phenomena. Three hours of lecture, and one hour and twenty minutes of laboratory each week. Lab fee. Prerequisite: MATH—110. Students must purchase an approved graphing calculator prior to beginning this course. (ATTR: ARTS, CAQ)

**MATH—191. Mathematical Problem Solving 1 credit**

An introduction to the art and craft of mathematical problem solving. Students interact in a seminar setting, discussing and solving interesting mathematical problems. Oral presentations of problems and solutions are a required part of this course. There are no prerequisites. (ATTR: ARTS)

**MATH—210. Calculus III (Lecture and Laboratory) 4 credits**

This course completes the Calculus sequence. The topics covered are vectors in the plane and in three dimensional space, functions of several variables, partial differentiation, the chain rules, multiple integration including cylindrical and spherical coordinate systems and the theorems of Green and Stokes. Students apply these concepts to physical applications. Three hours of lecture and two hours of lab each week. Lab fee. Prerequisite: MATH—120. (ATTR: ARTS)

**MATH—230. Linear Algebra 3 credits**

This course studies the elements of linear algebra with an emphasis on applications. Topics covered include matrices, systems of equations, finite dimensional vector spaces, linear transformations, eigenvalues and eigenvectors. Prerequisite: MATH—120. (ATTR: ARTS)

MATH—240, SCDV—240. Introduction to Computer Algebra 3 credits

An in-depth introduction to computer algebra system. The basic features of the computer algebra system, a study of the embedded functions, programming and graphics will be covered. Emphasis will be on the development of an understanding of the system and the capabilities that will allow for the successful application of this powerful tool to the solution of mathematical and scientific problems. Prerequisite: MATH—120. (ATTR: ARTS)

MATH—250. Discrete Structures I (Lecture and Laboratory) 4 credits

This course includes a study of mathematical structures most frequently encountered in Computer Science. Topics covered include sets, functions, mathematical induction, complexity analysis of algorithms, counting methods including probability, recurrence relations, graphs, trees, Boolean logic, and relations. Proofs using mathematical induction will be emphasized. Other proof techniques will be developed. Three hours of lecture and 80 minutes of lab each week. Prerequisites: MATH—120, CSIS—120. Offered in Fall Semester. (Same as CSIS—251) (ATTR: ARTS)

MATH—301. Foundations of Mathematics 3 credits

The course introduces students to the creative process of doing mathematics and the language and style of precise mathematical communication. We do this by investigating logic, set theory and mathematical proof. The main emphasis of the course is on composing logically correct mathematical arguments and communicating those arguments through oral and written presentations. Prerequisites: MATH—120. (ATTR: ARTS, MHUL)

MATH—310. Introduction to Modern Algebra 3 credits

This course is an introduction to the elementary theory of groups and rings, developed axiomatically. Other topics covered are subgroups and cosets, normal subgroups, factor groups, homomorphism and isomorphism of groups and rings, fundamental theorems for groups and rings. Prerequisites: MATH—230, MATH—301. Offered Fall Semester. (ATTR: ARTS, MHUL)

MATH—320. Mathematical Analysis 3 credits

Introduction to the fundamental concepts of mathematical analysis. A study of the real number systems, limits, sequences, series, convergence, uniform convergence, functions of one variable, continuity, differentiability, Riemann integration, functions of several variables, line, surface, and volume integrals. Prerequisite: MATH—210 and MATH—301. Offered Spring Semester. (ATTR: ARTS, MHUL)

MATH—325. Differential Equations (2 hours of lecture, 2 hours laboratory) 3 credits

A study of differential equations using analytic, numerical and graphical techniques. Emphasis is placed on the formulation of models that result in a differential equation and the interpretation of solutions. Slope fields, graphs of solutions (analytic and numerical), vector fields, and solution curves in the phase plane will be used to gain a better understanding of differential equations. Computer based tools will be used to investigate the behavior of solutions both numerically and graphically. Prerequisite: Calculus III or Calculus II and permission of the instructor. Offered Spring Semester. (ATTR: ARTS, MHUL)

MATH—330. Introduction to Applied Mathematics I 3 credits

In this course there will be applications of first and second order differential equations and linear algebra. The series solutions of the differential equations of Bessel and Legendre are studied in detail. Other topics include Fourier series and expansions as well as other series comprised of orthogonal functions. Applications of these expansions will be discussed as time allows. Prerequisite: MATH—325. (ATTR: ARTS, MHUL)

MATH—340. Introduction to Number Theory 3 credits

A discussion of the basic properties of the set of integers. Prime numbers and the Euclidean Algorithm. Number-theoretic functions, especially the Euler phi-function. Linear congruences and their applications to the solution of Diophantine Equations. Exponents and primitive roots. Quadratic residues and the Law of Quadratic Reciprocity. Prerequisite: MATH—301. Offered Spring Semester. (ATTR: ARTS, MHUL)

MATH—350. Discrete Structures II 3 credits

This course is a continuation of the study of mathematical structures most frequently encountered in Computer Science. Topics covered include deterministic and non-deterministic finite automata, regular, context-free and other languages, push-down automata, grammars, Turing machines, computational complexity, and in particular the P vs. NP problem. Prerequisites: MATH—250, or CSIS—251. Offered in Spring Semester. (Same as CSIS—351. (ATTR: ARTS, MHUL)

**MATH—360. Euclidean and Non-Euclidean Geometry 3 credits**

An introduction to the techniques of Euclidean and Non-Euclidean geometry. Topics include: plane Euclidean geometry, geometric transformation groups, spherical geometry, the projective and hyperbolic planes. Prerequisites: MATH—210, MATH—301. Offered Fall Semester. (ATTR: ARTS, MHUL)

**MATH—371. Probability for Statistics 3 credits**

The course introduces mathematical probability to understand variation and variability. Methods of enumeration, conditional probability, independent events, and Bayes' Theorem are developed in a general environment. Among the continuous and discrete probability distributions derived and studied are the Bernoulli distribution and distributions based on it, the uniform, exponential, normal, Gamma and Chi Square distributions. The Central Limit Theorem leads to approximations for discrete distributions. Chebyshev's Inequality prepares the students for Inferential Statistics. Prerequisites: MATH—210 (may be taken concurrently). Offered Spring semester. (ATTR: ARTS, MHUL)

**MATH—425. Differential Geometry 3 credits**

This course is an introduction to the theory of curves and surfaces in the three-dimensional Euclidean space. Topics include curve arc length, curvature, torsion, the Frenet n-frame, the first and second fundamental forms of a surface, normal and principal curvatures, Gaussian and the mean curvatures, isometries of surfaces, and geodesic curves on a surface. Prerequisites: MATH—210. (ATTR: ARTS, MHUL)

**MATH—430. Introduction to Applied Mathematics II 3 credits**

Applications of Fourier series and expansions to the solution of the classical partial differential equations of mathematical physics and an introduction to complex variables. Prerequisite: MATH—330. Offered Spring Semester. (ATTR: ARTS, MHUL)

**MATH—440. Complex Variables 3 credits**

An introduction to the study of functions of a complex variable. Topics will include complex numbers, sequences, analytic functions, Cauchy-Riemann equations, complex integration, Laurent and Taylor Series, residue theorem, and conformal mapping. Prerequisite: MATH—210. Offered Fall Semester. (ATTR: ARTS, MHUL)

**MATH—460. Topology 3 credits**

This is a one semester introductory course in Topology. The topics covered include: Open and closed sets, topologies on general point sets, connectedness, compactness, continuity, product and quotient topologies, and metric spaces. Applications to other areas in mathematics (principally geometry and analysis) will be explored. Prerequisite MATH—210 or 301. Offered Spring Semester. (ATTR: ARTS, MHUL)

**MATH—470. Mathematical Statistics 3 credits**

Statistical tests for multivariable problems are developed and applied to real data sets. The computer and the SPSS package will be used. Prerequisite: MATH—210 and MATH—371. Offered Fall Semester. (ATTR: ARTS, MHUL)

**MATH—480. Mathematics of Finance 3 credits**

This course builds on the knowledge base contained in previous courses taken by actuarial students. The goal is to reinforce understanding of the fundamental concepts of financial mathematics, and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use. Students will review basic financial instruments and expand their knowledge base to more modern financial analysis using yield curves, spot rates and immunization. Finally students will be introduced to the concept of risk management and understand how principles such as derivatives, forwards, futures, short and long positions, call and put options, spreads, collars, hedging, arbitrage, and swaps affect a firm's risk. (Same as QBUS—480) Prerequisite: FINC—301, FINC—315, and MATH—120, or permission of instructor. (ATTR: ARTS, BUS, MHUL)

**MATH—490. Mathematics Seminar 1 credit**

Consideration of a mathematical topic selected on the basis of faculty and student interest. Designed for students with good mathematical backgrounds. May be taken twice with different topic. Permission of instructor or department required for registration. Offered Spring Semester. (ATTR: ARTS, MHUL)

**MATH—499. Independent Study in Mathematics 1 - 3 credits**

Study or research on an advanced mathematics topic under the tutelage of a qualified faculty member. May be taken more than one semester. Prerequisites: All mathematics courses specified for a major in mathematics. Permission of faculty mentor and department head required for registration. (ATTR: ARTS, MHUL)

## Physics and Astronomy Department

Chair: Dr. Rose A. Finn, Assoc. Prof.

Prof.: Dr. Thomas P. Coohill, Dr. Larry R. Medsker, Dr. Allan T. Weatherwax#

Assoc. Prof.: Dr. John P. Cummings, Dr. Mark A. Rosenberry, Dr. Graziano Vernizzi

Asst. Prof.: Dr. Matthew Bellis, Dr. Michele McColgan, Dr. John Moustakas

The Department of Physics and Astronomy aims to develop in its students a comprehensive grasp of the principles of physics. The program emphasizes the concepts and techniques that have led to our present state of understanding of the physical universe.

The department offers a flexible and comprehensive program. Placed in the context of a liberal arts environment, the generality and applicability of Physics grant the major three broad options upon graduation. He or she is well prepared to pursue graduate study in Physics or an allied field, to embark immediately upon a professional career in science, or to enter one of the numerous careers which require or are enhanced by a broad knowledge of science in today's technological society.

Contributing to the flexibility of Siena's Physics program is the unstructured Advanced Laboratory sequence in which students pursue projects of their choosing with the guidance of faculty advisors. The equipment of all lab courses (optics, electronics, modern physics and experimental techniques) plus the research equipment of the department are available for these projects. Some example equipment includes: an X-ray diffractometer, 1.5m grating spectrometer, HeNe and diode lasers including a 20W diode array, spectrum analyzer, magnetometers, dual frequency GPS receivers, signal digitizer, nuclear counters, wavemeter (accurate to 0.001 nm), diffusion and turbo vacuum pumps, and computers that interface with digital multimeters through Labview.

Satisfactory performance in all laboratory work is necessary to obtain a passing grade in any Physics course accompanied by a laboratory experience.

A curriculum is offered for those interested in teaching, and the Department also offers a 3/2 program in affiliation with Catholic University, Clarkson University, Manhattan College, Rensselaer Polytechnic Institute, SUNY Binghamton and Western New England College leading to the B.S. in Physics and a B.E. in electrical, mechanical, civil, biomedical, aeronautical, nuclear, or materials engineering. Programs leading to a Master's degree are also available through Rensselaer.

*Education Certification:* For teacher certification in the secondary schools, students must complete 30 hours in Physics and cognate courses as outlined below. In addition, the student must achieve a minimum quality point average of 2.5 in Physics courses and 2.75 overall. Students successfully completing this program receive a B.S. in Physics and New York State Initial Certificate in Adolescence Education in the subject area of Physics.

### Requirements for the Major, B.S. in Physics (12 courses):

PHYS 130 - General Physics I		4 cr.
PHYS 140 - General Physics II		4 cr.
PHYS 220 - Modern Physics		4 cr.
PHYS 250 - Computational Physics		3 cr.
PHYS 260 - Thermal Physics		3 cr.
PHYS 370 - Experimental Techniques	OR	2 cr.
PHYS 380 - Observational Astronomy		3 cr.
PHYS 310 through PHYS 460		4 courses

Students must complete 4 additional advanced courses (numbered 300 and above). Courses must total at least 13 credits. At least two of the courses must come from the following:

PHYS 310 - Mechanics I	
PHYS 410 - Electromagnetic Theory I	
PHYS 440 - Quantum Physics	13 cr.

PHYS 470 - Advanced Laboratory I	1 cr.
PHYS 472 - Advanced Laboratory II	1 cr.

### Auxiliary (33.000 credits)

CHEM 110 - General Chemistry 1	4 cr.
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CHEM 120 - General Chemistry II	4 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 325 - Differential Equations	3 cr.
MATH 230 - Linear Algebra	<b>OR</b>
MATH 330 - Intro to Applied Mathematics I	3 cr.
SCDV 230 - Electronic Instrumentation	4 cr.
CSIS 110 or higher	3 cr.

Transfer students from two-year colleges may receive credit for General Physics I, II, Modern Physics, Thermal Physics, Calculus I, II, III, Differential Equations, General Chemistry I and General Chemistry II.

Pre-engineering students are advised to take General Physics I and II in the freshman year. Advanced laboratory will count as one of the six required courses.

**Requirements for the Major, B.S. in Physics 3/2 Program (12 courses):**

PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 220 - Modern Physics	4 cr.
PHYS 250 - Computational Physics	3 cr.
PHYS 260 - Thermal Physics	3 cr.
PHYS 370 - Experimental Techniques	<b>OR</b>
PHYS 380 - Observational Astronomy	3 cr.
PHYS 310 through PHYS 460	4 courses

Students must complete 4 additional advanced courses (numbered 300 and above). Courses must total at least 13 credits. At least two of the courses must come from the following:

PHYS 310 - Mechanics I	
PHYS 410 - Electromagnetic Theory I	
PHYS 440 - Quantum Physics	13 cr.
PHYS 470 - Advanced Laboratory I	1 cr.
PHYS 472 - Advanced Laboratory II	1 cr.

**Auxiliary (35.000 credits)**

CHEM 110 - General Chemistry 1	4 cr.
CHEM 120 - General Chemistry II	4 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 325 - Differential Equations	3 cr.
SCDV 230 - Electronic Instrumentation	<b>OR</b>
MATH 330 - Intro to Applied Mathematics I	3 cr.
CSIS 110 or higher	3 cr.

Students spend the first 3 years at Siena and the last 2 at one of the following cooperating institutions : Catholic University, Rensselaer Polytechnic Institute, Clarkson University, Manhattan College, Western New England College or SUNY Binghamton.

Students earn a B.S. degree in Physics from Siena as well as a B.E. in Engineering from the chosen institution.

**Requirements for the Major, B.S. in Physics (Biological Chemical Sciences Track):**

PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 220 - Modern Physics	4 cr.
PHYS 260 - Thermal Physics	3 cr.
PHYS 250 - Computational Physics	3 cr.
PHYS 370 - Experimental Techniques	2 cr.

Students must complete 4 additional advanced courses (numbered 300 and above).

Courses must total at least 13 credits. At least two of the courses must come from the following:

PHYS 310 - Mechanics I	
PHYS 410 - Electromagnetic Theory I	
PHYS 440 - Quantum Physics	13 cr.

Students must also conduct a research project, which will be completed in the following courses:

PHYS 470 - Advanced Laboratory I	1 cr.
PHYS 472 - Advanced Laboratory II	1 cr.

**Auxiliary (35.000 credits)**

CSIS 110 or higher	3 cr.
MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 325 - Differential Equations	3 cr.
CHEM 110 - General Chemistry I	4 cr.
CHEM 120 - General Chemistry II	4 cr.

Students must also take 9 additional credits in either biology or chemistry. 9 cr.

Biology, courses must be BIOL 220 or above.

Chemistry, courses must be CHEM 210 or above.

Designed for students majoring in Physics who wish to have a more substantial concentration in Biology and/or Chemistry.

**Requirements for the Major, B.S. in Physics (Computational Physics Track): (12 Courses)**

PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 220 - Modern Physics	4 cr.
PHYS 250 - Computational Physics	3 cr.
PHYS 260 - Thermal Physics	3 cr.
PHYS 370 - Experimental Techniques	2 cr.
PHYS 380 - Observational Astronomy	3 cr.
PHYS 310 through PHYS 460	4 courses

Students must complete 4 additional advanced courses (numbered 300 and above). Courses must total at least 13 credits. At least two of the courses must come from the following:

PHYS 310 - Mechanics I	
PHYS 410 - Electromagnetic Theory I	
PHYS 440 - Quantum Physics	13 cr.

PHYS 470 - Advanced Laboratory I	1 cr.
PHYS 472 - Advanced Laboratory II	1 cr.

**Auxiliary (32.000 credits)**

MATH 110 - Calculus I	4 cr.
MATH 120 - Calculus II	4 cr.
MATH 210 - Calculus III	4 cr.
MATH 325 - Differential Equations	3 cr.
MATH 230 - Linear Algebra	<b>OR</b>
MATH 330 - Intro to Applied Mathematics I	3 cr.
SCDV 230 - Electronic Instrumentation	4 cr.
CSIS 110 - Introduction to Computer Science	<b>OR</b>
CSIS 120 - Introduction to Programming	3 or 4 crs.
CSIS 210 - Data Structures	3 credits
CSIS 220 - Assembly Language and Computer Architecture	4 credits

**Requirements for the Minor, Physics (6 courses):**

PHYS 130 - General Physics I	4 cr.
PHYS 140 - General Physics II	4 cr.
PHYS 210 through PHYS 440, or SCDV 230	4 courses

Advanced laboratory (PHYS470 and PHYS472) may be substituted for one of the 4 courses above. However, it may only be taken with permission and must be taken for a total of two credit hours.

Advanced laboratory will count as one of the six required courses.

### Description of Courses

PHYS—010. Topics in the Physical Sciences 3 credits

A course of lectures and demonstrations on the principles and laws governing the physical world. It may be offered with emphasis on a specific topic, and content will be indicated by subtitle. This course is intended to fulfill part of the School of Science Core requirement for School of Liberal Arts and School of Business majors and is not open to Physics majors. It may be taken more than once with different content. Examples of special topics include:

#### Astronomy

A course which serves as an introduction to the basic principles of Astronomy. The course is taught at a non-technical level, and is intended for both science and non-science majors. Topics include the history of Astronomy, the Solar System, stars, galaxies, the structure and evolution of the Universe, and the origin and evolution of life. Emphasis is placed on the quantitative and qualitative description of astronomical objects, the methods of scientific deduction, and the implications of astronomical knowledge. Opportunities for field and laboratory work will be provided. (ATTR: ARTS, CAN, CDN)

#### Structures

A course about the nature of properties of structures, from the pyramids to modern skyscrapers. The course begins with a brief examination of the nature of materials. This is followed by a systematic study of a variety of different structures, including pyramids, houses, bridges, and cathedrals. Students will be expected to participate in in-class projects. (ATTR: ARTS, CAN, CDN)

#### Introduction to Nanoscience

This course introduces students to the relatively recent and emerging field of nanoscience and nanotechnology. It is a highly multidisciplinary field, where physics, chemistry, biology, materials science meet at the nanometer scale. The course begins from a non-technical level and is designed for both science and non-science majors. It covers topics ranging from nanomeasurement techniques, nanofabrication, nanostructured materials, self-assembling nanostructures, applications to engineering and to biotechnology. Emphasis is placed discussing the impact of nanotechnologies in a globalized world and its possible benefits (environmental safety, energy production, manufacturing, drug design, information technology) versus its potential risks (health issues, environmental pollution, societal issues, ethical issues). (ATTR: ARTS, CFN)

In addition, the following topics courses are taught:

Light, Color and Lasers (ATTR: ARTS, CAN)

Atmosphere and Oceans (ATTR: ARTS, CAN)

Physics: An Historical Approach (ATTR: ARTS, CAN)

Physics of Music (ATTR: ARTS, CFN)

PHYS—040. Non-core Topics in the Physical Sciences 3 credits

A topics course similar to PHYS—010, except the topics offered have not been approved to fulfill the School of Science Core requirement for School of Liberal Arts and School of Business students. Students may take this course more than once with different content. Not open to Physics majors. Does not count towards College Core.

PHYS—055. Energy and Environment 3 credits

The significant impact of society's energy needs on the environment will be examined. The course will cover our society's different sources of energy (fossil fuel, nuclear, hydropower, solar, etc), discussing how each is obtained, and giving their advantages and limitations. The use of energy in the future will also be explored, as some present sources run out and new ones become practical. The basis of climate will be developed, and students will learn how changes to Earth's atmosphere and oceans affect human civilizations and natural

ecosystems. Each week one or more group or demonstration experiments will be performed, to illustrate concepts. (ATTR: ARTS, CAN, CFN)

**PHYS—080. Conceptual Physics (Lecture) 3 credits**

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Practical and everyday aspects of physics that will be discussed include the mechanics of sports, electricity, optics, and how the eye and camera work etc. Additional topics may include atoms, quantum theory, the laser, the theory of relativity and cosmology (just what is a black hole?). Requires one year of high school algebra. (ATTR: ARTS, CAN)

**PHYS—110. General Physics IA (Lecture and Laboratory) 4 credits**

An introductory course in physics for students of the life sciences emphasizing kinematics, Newtonian dynamics and energy. Also includes rotational motion, fluids, heat and thermodynamics. Applications to biological systems are discussed. Three hours of lectures and one three-hour laboratory period a week. Lab fee. (ATTR: ARTS, CAN, CDN)

**PHYS—120. General Physics IIA (Lecture and Laboratory) 4 credits**

A continuation of PHYS—110 for life science students, treating electricity and magnetism, electric circuits, waves and optics, and elementary topics in atomic and nuclear physics. Includes applications to biological systems. Three hours of lectures and one three-hour laboratory period a week. Prerequisite: PHYS—110. Lab fee. (ATTR: ARTS, CAN)

**PHYS—130. General Physics I (Lecture and Laboratory) 4 credits**

The general physics sequence provides an introduction to those basic concepts of physics that form the foundation of all the natural sciences. The first course is mainly an introduction to classical mechanics where the fundamental laws of Newtonian mechanics are applied to a variety of simple systems. Some elementary thermodynamics is also included. Throughout the course, the conservation laws serve as unifying physical principles. Mathematics, a powerful tool in the understanding of natural phenomena, assumes its essential role. Computers are used in the laboratories. Three hours of lecture and one three-hour laboratory period a week for one semester. Prerequisite or corequisite: MATH—110. Lab fee. (ATTR: ARTS, CAN, CDN)

**PHYS—132. General Physics Review 0 credit**

Provides review and amplification of selected general physics topics together with techniques and practice in physics problem solving. To be taken concurrently with General Physics I (PHYS—130). Required for Physics majors (including Physics majors in the 3/2 Program), open to all students enrolled in PHYS—110 or PHYS—130. One hour per week. (ATTR: ARTS)

**PHYS—140. General Physics II (Lecture and Laboratory) 4 credits**

A continuation of the general physics sequence. Fundamentals of electricity and magnetism, dc and ac circuits, electromagnetic waves, geometric optics of mirrors and lenses, interference and diffraction phenomena in light. Three hours of lecture and one three-hour laboratory period a week for one semester. Prerequisite: PHYS—130. Prerequisite or corequisite: MATH—120. Lab fee. (ATTR: ARTS, CAN)

**PHYS—142. General Physics II Review 0 credits**

Provides review and amplification of selected general physics topics together with techniques and practice in physics problem solving. To be taken concurrently with General Physics II (PHYS—140). Required for all Physics majors (including Physics majors in the 3/2 program), open to all students enrolled in PHYS—120 or PHYS—140. One hour per week.

**PHYS—220. Modern Physics (Lecture and Laboratory) 4 credits**

An introduction to modern physics. Relativistic dynamics, particle aspects of electromagnetic radiation, the wave aspects of material particles, the many-electron atom and nuclear structure are considered. The laboratory includes many of the classical experiments which led to the discovery of quantum mechanics. Three hours of lecture and one three-hour laboratory period a week for one semester. Prerequisites: MATH—120; and PHYS—120 or 140. Lab fee. (ATTR: ARTS, CFN)

**PHYS—222. Modern Physics (Lecture only) 3 credits**

Same as PHYS—220, but without laboratory. Offered to non-Physics majors only. Prerequisites: MATH—120; and PHYS—120 or 140. (ATTR: ARTS)

PHYS—250. Introduction to Computational Physics (Lecture and Laboratory) 3 credit  
Methods of computer simulation and its diverse applications are introduced. The course is project-oriented; projects include the motion of massive and charged particles, chaotic systems, and random systems. Methods include the numerical solution of differential equations, fast Fourier transforms, and Monte Carlo techniques. Two hours of lecture and three hours of laboratory a week for one semester. Prerequisites: PHYS—110 or PHYS—130; MATH—120, and CSIS—110. Lab fee.

PHYS—260. Thermal Physics 3 credits  
A study of thermal phenomena from a macroscopic point of view, including the development and applications of the first two laws of thermodynamics, entropy, thermodynamic potentials, and equilibrium phenomena. The concept of distribution functions is developed. This is followed by a study of classical statistical mechanics and the statistics of Bose-Einstein and Fermi-Dirac. Three hours of lecture a week for one semester. Prerequisites: MATH—210, PHYS—110 or 130. (ATTR: ARTS, PHYS)

\*PHYS—310. Mechanics I 4 credits  
Newtonian mechanics of particles and systems of particles, including rigid bodies. Topics include vector analysis, potential theory, central forces, the two-body problem, collisions, oscillatory phenomena, moving reference frames. Lagrangian and Hamiltonian formulation of classical mechanics. Theory of small vibrations. Four hours of lecture a week for one semester. Prerequisites: PHYS—110 or 130. Prerequisite or corequisite: MATH—325. (ATTR: ARTS, PHYS)

\*\*\*PHYS—320. Mechanics II 2 credits  
A continuation of PHYS—310. Two hours of lecture a week for one semester. Prerequisite: PHYS—310. (ATTR: ARTS, PHYS)

PHYS—350. Simulation & Modeling (Lecture and Laboratory) 3 credits  
A study of computer simulation and modeling methods with application to physical systems. Topics will be selected from: the two-body problem, linear and nonlinear systems, chaotic motion, random processes, normal modes and waves, numerical integration and Monte Carlo methods, random walks, percolation, fractals, and transforms. Additional topics may be included. Two hours of lecture and three hours of laboratory a week for one semester. Prerequisite: PHYS—250 and CSIS—120, or permission of instructor. Lab fee. (ATTR: ARTS)

\*PHYS—370. Laboratory Techniques (Lecture and Laboratory) 2 credits  
An introduction to the tools and methods of active research. Topics will include such practical concerns as computer interfacing, control circuits, basic vacuum system design, and proper handling of diode lasers. These skills will then be applied to investigate techniques such as Faraday rotation, interferometry, and electron beam steering. One hour of lecture and four hours of laboratory each week for one semester. Prerequisites: PHYS—220, SCDV—230. Lab fee.

PHYS—380. Observational Astronomy (Lecture and Laboratory) 3 credits  
This course provides a hands-on, project-based introduction to the tools and techniques used to acquire and analyze astronomical data. It is intended primarily for Astrophysics majors. Topics covered include: introduction to the techniques of gathering and analyzing astronomical data; telescope design and optics; instrumentation for imaging, photometry, and spectroscopy; astronomical detectors; image processing and data visualization; error analysis and curve fitting; data analysis and astrophysical interpretation. Two hours lecture and two hours laboratory. Permission of instructor required. Lab fee. (ATTR: ARTS, PHYS)

PHYS—390. Intro Astrophysics I 3 credits  
This course provides a physics-based, mathematical introduction to the astronomy of stars. It is intended primarily for Physics majors. Topics which are covered include: celestial mechanics; the solar system; electromagnetic radiation; telescopes and detectors; the Sun; the observed properties of stars; binary stars; stellar interiors; stellar spectra; and the life and death of stars. Prerequisite: PHYS—140. (ATTR: ARTS, PHYS)

PHYS—392. Intro Astrophysics II 3 credits  
This course provides a physics-based, mathematical introduction to the astronomy of galaxies and the Universe. It is intended primarily for Physics majors. Topics which are covered include: the Milky Way; galaxies; clusters of galaxies; dark matter; Hubble's Law; large-scale structure of the Universe; active galaxies and quasars; the big bang; the physics of the early universe. Prerequisite: PHYS—390. (ATTR: ARTS, PHYS)

\*\*\*PHYS—400. Special Topics in Physics 1 - 3 credits

Study of a topic in Physics selected on the basis of faculty and student interest. Prerequisites depend on the topic being offered, and course registration requires permission of the instructor. May be taken more than once with different topics. (ATTR: ARTS, PHYS)

\*PHYS—410. Electromagnetic Theory I 4 credits

A development of Maxwell's electromagnetic field equations and an examination of some of their consequences. Electrostatics, steady currents, and static magnetic fields; dielectric and magnetic materials, time-dependent electric and magnetic fields, and the complete Maxwell theory; energy in the electromagnetic field, Poynting's theorem, electromagnetic waves, and radiation from time-dependent charge and current distributions. Four hours of lecture a week for one semester. Prerequisites: PHYS—120 or 140. Prerequisite or corequisite: MATH—325. (ATTR: ARTS, PHYS)

\*\*\*PHYS—420. Electromagnetic Theory II 2 credits

A continuation of PHYS—410. Two hours of lecture a week for one semester. Prerequisite: PHYS—410. (ATTR: ARTS, PHYS)

\*PHYS—430. Solid State Physics 3 credits

An introduction to modern solid-state physics, including lattice structure, lattice vibrations, thermal properties, electron theory of metals and semiconductors, magnetic properties, and superconductivity. Three hours of lecture a week for one semester. Prerequisites: PHYS—220 or CHEM—310 or 320. (ATTR: ARTS, PHYS)

\*PHYS—440. Quantum Physics 3 credits

Wave-particle duality and Heisenberg uncertainty principle. Basic postulates of quantum mechanics, Schrodinger equation and wave functions, solution of the Schrodinger equation for one-dimensional systems and for the hydrogen atom. Perturbation theory, operator formalism, matrix mechanics. Three hours of lecture a week for one semester. Prerequisites: MATH—380, PHYS—220 or PHYS—222, or permission of instructor. Prerequisite or corequisite: MATH—330. (ATTR: ARTS, PHYS)

PHYS—470. Advanced Laboratory I 1-3 credits

Students pursue open-ended experimental or theoretical investigations of their choice with faculty approval and supervision. The research instruments of the School are available including spectrometers, electromagnets, an X-ray diffractometer, and nuclear detectors. Seminars and written reports are required. One three-hour laboratory or research period per credit. Prerequisite: SCDV—230 or permission of instructor. Lab fee. (ATTR: ARTS)

PHYS—472. Advanced Laboratory II 1 or 2 credits

A continuation of PHYS—470. Prerequisite or corequisite: PHYS—470. Lab fee. (ATTR: ARTS)

PHYS — 499. Independent Research 1 - 3 credits

Original laboratory and literature research under the direction of a faculty member. This course is arranged by mutual consent of the student and faculty member. (ATTR: ARTS)

## **Military Science and Leadership Department**

Chair: LTC Samantha Ross, Prof.

Asst. Prof: CPT Michael Richardson, MAJ James Prendergast

Instructors: MSG Heath Blackmon, SFC Justin Hamblin, 1SG Shawn Morgan

The purpose of the courses offered by the Military Science and Leadership Department are to train quality college students to become the future leaders of the United States Army and the civilian community. The course of study is divided into two parts—the first two years (Basic Course) and the last two years (Advanced Course). Students incur no military obligation while enrolled in the Basic Course and may withdraw from the course at their option. Selection for the Advanced Course is competitive. Students selected for the Advanced Course participate on a contractual basis and receive \$300-\$500 stipend per school month payment and an additional \$900-\$1200 book allowance each year from the government. Emphasis of the Advanced Course is on applied, individual leadership development, and exposure of the student to military management systems and techniques.

Students not desiring an Army commission may still enroll and complete any basic military science course for elective credit. Such participation does not incur any contractual obligations.

A student may satisfy requirements for application to the Advanced Course in pursuit of a commission in one of three ways:

- (1) Completion of the first two years (Basic Course) allows a student to earn four academic credits towards graduation while qualifying for the Advanced Course. The student is expected to attend one hour of classroom instruction during the Basic Course.
- (2) Students may also qualify for entrance into the Advanced Course by selection to the four-week Leadership Training Course (LTC) held the summer between their sophomore and junior year at Fort Knox, KY. Qualified students may compete for two-year scholarships while attending the summer Leadership Training Course. Students may elect to enter the Advanced Course upon successful completion of LTC. All expenses to attend the course are fully funded by the military. Attendance at the summer Basic Camp does not obligate the student to enroll in ROTC unless they are awarded and accept a scholarship.
- (3) Students with Junior ROTC, Senior ROTC, service academy experience, or prior military service may also qualify to enter the Advanced Course.

The ROTC program may be pursued in conjunction with any academic major offered at Siena. Completion of the Advanced Course qualifies graduates to receive an officer's commission concurrent with the baccalaureate degree and does not necessarily interfere with subsequent graduate or professional studies.

During the senior year, the student has the option of applying for one of two types of commissions. The first type, a Reserve Forces Duty commission as a citizen Soldier with the Reserve Forces, is for graduates wishing to serve in the US Army Reserve or US Army National Guard, while pursuing a civilian occupation. The second option enables graduates to go on active duty, as a Second Lieutenant in their assigned military specialty.

Laboratories offered by the Department of Military Science and Leadership focus on the application of leadership methods and techniques that are taught in the classroom. Some are scheduled on weekdays and some on weekends, and they are typically conducted at off-site locations. Laboratories also stress adventure and outdoor activity as a means to build personal confidence. This is an optional activity for students who are not pursuing a commission. Labs are mandatory for students in the Advanced Course and for those who are receiving scholarship benefits.

All students accepted into the Advanced Course must attend the Leadership Development and Assessment Course (LDAC) during the summer after their junior year. The purpose of LDAC is to evaluate the leadership potential of officer candidates who wish to pursue a commission in the United States Army. This four week course builds upon the skills and methods taught in the junior year.

Exciting internships are offered to enrolled sophomores and juniors who qualify. These internships offer students the ability to become certified in skills taught by U.S. Army Schools. Some of these skills are parachutist certification, rappelling certification and outdoor survival certification. Other internships include foreign language programs in other countries and the opportunity to serve in multiple career fields found in the United States Army as junior leaders. There are a variety of programs that also compensate students for demonstrated academic proficiency in certain languages.

### **Description of Courses**

MILS—100. Introduction to Military Leadership I 1 credit

The course introduces students to fundamental components of service as an officer in the United States Army. These initial lessons are the building blocks of progressive lessons in values, fitness, leadership, and officership. Students will learn how the personal development of life skills such as cultural understanding, goal setting, time management, mental/physical resiliency, and stress management relate to leadership, officership, and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership attributes and core leader competencies while gaining an understanding of the ROTC program, its purpose in the Army, and its advantages for the student. (ATTR:ARTS)

MILS—110. Introduction to Military Leadership II 1 credit

The course builds upon the fundamentals introduced in MILS—100 by focusing on leadership theory and decision making. "Life skills" lessons in the semester include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion, students are prepared to advance to more complex leadership instruction concerning the dynamics of organizations. (ATTR:ARTS)

MILS—200. Foundations of Military Leadership I 1 credit

The course contains the principal leadership instruction of the Basic Course. The use of practical exercises is emphasized, as students are increasingly required to apply communications and leadership concepts. The focus continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation and infantry squad tactics. Case studies will provide a tangible context for learning and understanding the Soldier's Creed and Warrior Ethos. Upon completion of this semester, students should be well grounded in the fundamental principles of leadership, and be prepared to intensify the practical application of their studies during the Advanced Course. (ATTR:ARTS)

MILS—210. Foundations of Military Leadership II 1 credit

The course focuses principally on officership, providing an extensive examination of the unique purpose, roles, and obligations of commissioned officers. It includes a detailed look at the origin of the Army's institutional values and their practical application in decision making and leadership. Students examine the challenges of leading teams in a complex, combat operational environment. The course highlights dimensions of terrain analysis, infantry patrols, and operation orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. This course draws on the various components of values, communications, decision making, and leadership together to focus on a career as a commissioned officer. Upon completion of this course, students should possess a fundamental understanding of both leadership and officership and demonstrate the ability to apply this understanding in real world situations. (ATTR:ARTS)

MILS—300. Applied Military Leadership I 2 credits

In this course students will study, practice, and apply the fundamentals of Army leadership, Officership, Army Values and ethics, personal development, and small unit tactics at the team and squad level. At the conclusion of this course, students will be capable of planning, coordinating, navigating, motivating and leading a team or squad in the execution of a tactical mission during a classroom PE, a Leadership Lab, or during a Situational Training Exercise (STX) in a field environment. Successful completion of this course will help prepare students for success at the ROTC Leader Development and Assessment Course (LDAC) during the summer following the junior year, at Fort Lewis, WA. This course includes reading assignments, homework assignments, small group assignments, briefings, case studies, and practical exercises, a mid-term exam, and a final exam. Students will receive systematic and specific feedback on leader attributes values and core leader competencies from instructor and other ROTC cadre and MSL IV Cadets who will evaluate students using the ROTC Leader Development Program (LDP) model. The course closes with instruction in small unit battle drills to facilitate practical application and further leader development during labs and Situational Training Exercises (STX). (ATTR:ARTS)

MILS—310. Applied Military Leadership II 2 credits

The course continues to focus on doctrinal leadership and tactical operations at the small unit level. It includes opportunities to plan and conduct individual and collective skill training for military operations to gain leadership and tactical experience. The course synthesizes the various components of training, leadership and team building. Students are required to incorporate previous military science instruction for their practical application in a performance-oriented environment. Upon completion of the course, students will possess the fundamental confidence and competence of leadership in a small unit setting and are prepared to attend the Leadership Development and Assessment Course. (ATTR:ARTS)

MILS—400. Adaptive Military Leadership I 2 credits

The course concentrates on leadership, management and ethics. The course focuses students, early in the year, on attaining knowledge and proficiency in several critical areas they will need to operate effectively as Army officers. These areas include: Coordinate Activities with Staffs, Counseling Theory and Practice within the "Army Context," Training Management, and Ethics. While proficiency attained in each of these areas will initially be at the apprentice level, students will continue to sharpen these skills as they perform their roles as Cadet officers within the ROTC program and after commissioning. At the end of the course, students should possess the fundamental skills, attributes, and abilities to operate as competent leaders. (ATTR:ARTS)

MILS—410. Adaptive Military Leadership II 2 credits

The course focuses on completing the transition from Cadet to lieutenant. As a follow-on to the Ethics instruction in MILS—400, the course starts with a foundation in the legal aspects of decision making and leadership. The curriculum reinforces previous instruction on the organization of the Army and introduces how the Army organizes for operations from the tactical to the strategic level. This is followed by instruction on administrative and logistical management that will focus on the fundamentals of Soldier and unit level support.

At the core of the semester is the Advanced Course Capstone Exercise. This twelve-lesson exercise incorporates learning objectives from the entire military science curriculum. The Capstone Exercise will require students, both individually and collectively, to apply their knowledge to solve problems and confront situations commonly faced by junior officers. Upon completion of the course, students will be prepared for the responsibility of being a commissioned officer in the United States Army. (ATTR:ARTS)

## **Off Campus Opportunities**

### **Internships**

Internships offer students an opportunity to enrich and enliven their academic programs. Work is supervised and evaluated in conjunction with the on-campus coordinator and a designated individual in the agency, institution, or business organization providing the internship. Internships are generally open to seniors and in some cases juniors who meet departmental and school qualifications. The student must meet with the intern coordinator to determine the necessary requirements including, prerequisites, GPA requirements or any other academic standards which may apply.

The School of Liberal Arts, School of Business and School of Science each offer school internships. The school internships are field experiences integrated into the student's academic areas of interest. All school internships require a minimum of 40 hours of field experience for each hour of academic credit. Students participating in this program are required to keep a daily journal that relates the field experience to the student's academic area of interest. School internships also require a final paper that is due on the first day of the final examination period for that semester. The following are the minimum campus-wide regulations applied to internship participation:

1. To participate as interns, students must:
  - a. have matriculation status
  - b. be either juniors or seniors, depending upon each department's or school's rules
  - c. be full-time students  
(an exception may be made for part-time students for participation in an organization other than their regular employer)
  - d. have written permission signed by the internship coordinator or department head
  - e. submit this written permission to the Registrar at the time of registration
2. Internship participation is permissible during the fall and spring semesters and during the summer at the discretion of the academic department, school, or program. In order to participate in a summer internship, the student must be a senior with a minimum of 75 credits completed toward her/his degree, and must provide a program of study (signed by the student's advisor) outlining the completion of degree requirements within twelve months. Summer internships are limited to a total of three credit hours.
3. A student may earn up to a total of six credit hours for all internship activity and may take only one internship in a single semester. An exception is made for all students who take international internships. In these cases, a student may earn up to 8 credits for the international internship and may also earn up to a total of 3 credits for one additional internship.

To assist both the students and the internship coordinators, the Career Center serves as a Siena clearinghouse for information about school internships. A faculty member from each school is also available to discuss internships with students. Letter grades are earned for all departmental internships. However, all school internships are graded on a pass/fail basis. Because this pass/fail option is mandated by the College, the course does not count toward the maximum number of pass/fail courses that a student may take in any semester.

### **Study Abroad**

Siena College offers students in every major the opportunity to study abroad for an academic year or semester from an approved list of programs. The programs are varied and include direct enrollment at foreign universities, international internships, and service-learning placements, available in both English speaking and foreign-language environments. International study is typically undertaken during the junior year. Transfer students must spend one semester of full-time study at Siena before being eligible to study abroad. A minimum GPA of 2.75 is required to apply for study abroad; however most programs require applicants to have a GPA of 3.0. Passing grades earned during a semester abroad are accepted for credit

but are not included in the calculation of the Siena term or cumulative indices. A separate Supplemental Transcript including course titles and grades received while abroad is created and accompanies the regular Siena transcript. Summer study abroad is considered transfer credit and a grade of C or better must be earned in order for the credit to be accepted. Students are required to obtain prior approval from the office of International Programs for study abroad, otherwise credits from abroad may not be accepted. For detailed information consult the website [www.siena.edu/internationalprograms](http://www.siena.edu/internationalprograms).

### **Washington Semester**

Selected students may participate in a semester study program in Washington, D.C. under the combined auspices of Siena College and American University. Students choose to enroll in one of eight different programs: American Government, General American Government—Public Law, Justice, Foreign Policy, Economic Policy, International Trade and Business Policy, Journalism or Peace and Conflict Resolution. Each program includes two seminar courses and an internship in one of the following areas: Congressional offices and committees, research think tanks, Executive Branch agencies, interest groups, local government offices, or media offices. Students participating in the Economic Policy, International Trade and Business Policy, Justice or Peace and Conflict Resolution program may take an elective course offered by American University in lieu of the research project, while students in Journalism must choose an elective course. The student selecting an elective course will receive a total of 15 credits while those choosing to do the research project will receive a total of 16 credits for the semester. The program is offered each semester and is open to all juniors and seniors. Students are selected on a competitive basis. Students interested in participating in this program should contact Dr. Leon Halpert, Professor of Political Science. Information may also be obtained from the website: [www.washingtonsemester.com](http://www.washingtonsemester.com).

## **Pre-Professional Studies**

### **Pre-Medical, Pre-Dental and other Health-Related Studies**

Siena students preparing for the study of medicine, dentistry and most other health professions careers normally major in one of the sciences. The minimum undergraduate course requirements for entry to medical or dental school include: General Biology I and II, General Chemistry I, General Chemistry II, Organic Chemistry I and II, General Physics IA (or I) and IIA (or II), Calculus I and Calculus II, and one year of college-level English. Students in any of the science majors can accommodate these 40 credits of science within their degree program. Additional Biology courses (Cell Biology and Biochemistry) are recommended. All students should consult with the Health Professions Advisor and their academic advisor to insure appropriate course selection and course sequencing. Students interested in other health professions should consult with the Health Professions Advisor to be certain of meeting specific requirements for other professional schools. The Health Professions Recommendation Committee considers applications for careers in dentistry, medicine, optometry, osteopathic medicine, podiatry, and veterinary medicine.

### **Allied Health Professions**

Students interested in the allied health professions (physical therapy, physician assistant, etc.) are advised to take Anatomy and Physiology I and II- SCDV-210 and SCDV 211 and should consult with the Allied Health Professions Advisor.

### **Albany Medical College Physician Assistant Early Assurance Program Masters of Science Degree in Physician Assistant Studies**

The Early Assurance Program (EAP) is an opportunity for juniors to apply to the Center for Physician Assistant Studies at Albany Medical College (CPAS). Accepted students are required to complete their Bachelor's degree at Siena prior to matriculation in January after they graduate. Admission to this EAP is highly selective based on grades which include Overall and Science GPA (both greater than 3.20), SAT scores, recommendations, the personal statement, and an interview. Students must also complete at least one half (approximately 500 hours) of the 1000 hours of required health care experience. Interested students should contact the Allied Health Professions Advisor.

### **Sage Graduate School Doctorate of Physical Therapy Program: Articulation Agreement**

Siena College and The Sage Colleges School of Health Sciences have developed a collaborative agreement to provide qualified students from Siena College an opportunity to pursue a Doctorate of Physical Therapy

(DPT) from the Sage Graduate Schools (SGS). Qualified students apply after their junior year. Siena students will be given preferred admission to the Sage Colleges School of Health Sciences for the DPT degree, who demonstrate the following: 1.) On track for earning a baccalaureate degree, 2.) Overall and Science GPA of 3.25 or higher, 3.) Completion of the Physical Therapy Program Prerequisites with grade of C or better, 4.) Completion of a minimum 40 hours of Clinical Observation in various PT settings. Interested students should contact the Allied Health Professions Advisor.

#### **Sage Graduate School Masters in Occupational Therapy Program: Articulation Agreement**

Siena College and The Sage Colleges School of Health Sciences have developed a collaborative agreement to provide qualified students from Siena College an opportunity to apply to the Masters in Occupational Therapy (MS in OT) from the Sage Graduate Schools (SGS). Qualified students apply after their junior year and will be considered from a smaller pool of applicants. Requirements for application to this program include demonstrating the following: 1.) On track for earning a baccalaureate degree, 2.) Overall GPA of 3.25 or higher, 3.) Completion of the Occupational Therapy Program Prerequisites with grade of C or better, 4.) Completion of a minimum of 20 hours of Clinical Observation in various OT settings. Students interested in this program should contact the Allied Health Professions advisor.

#### **Sage Graduate School Masters in Applied Nutrition: Articulation Agreement**

Siena College and The Sage School of Health Sciences have developed a collaborative agreement which allows Siena College graduates to seamlessly transition into the Masters in Applied Nutrition Program at the Sage Graduate School. Qualified students will be given preferred admission into the Nutrition Program if they have met the course prerequisites prior to application. Students also have the option to enter into the Registered Dietitian track with additional prerequisite courses. If interested in this agreement, students should contact the Allied Health Professions advisor for additional information.

## **Affiliation/Articulation Agreements and Cooperative Programs**

#### **Affiliation/Articulation Agreements with 2-Year Institutions**

Siena College has developed affiliation agreements with Hudson Valley Community College, Adirondack Community College, and Ulster County Community College. The School of Science also has an affiliation agreement with Schenectady County Community College and SUNY-Cobleskill. Under the terms of these agreements, students who complete the programs outlined in the Community Colleges' catalogs and maintain the standards prescribed by the Coordinator of Transfer Admissions and the Dean of the appropriate School at Siena will be admitted to the College. Under ordinary circumstances, these students will be able to complete the requirements for a bachelor's degree in two years.

The Social Work Department has articulation agreements with Hudson Valley Community College and with Schenectady County Community College, describing courses of study in their Human Services majors which will transfer into Siena's Bachelor of Arts in Social Work program. For more information, contact the Chair of Social Work at Siena College.

SUNY Cobleskill, Siena College, and Upstate Medical University offer an eight-year continuum leading to the M.D. Degree. This program has been implemented to address the shortage of rural physicians. Contact SUNY Cobleskill for more information.

Students interested in further information about these programs should consult with the Coordinator of Transfer Admissions or the Assistant to the Dean of the appropriate School at Siena College.

#### **Business Management Programs**

Clarkson University

Siena College and the School of Business at Clarkson University have cooperated in establishing a 4/1 program that enables the student to earn the undergraduate degree and the MBA in five years. Through careful advisement, students may plan their undergraduate programs to include certain approved foundation courses that serve as preparation for graduate work in management. A Siena graduate meeting the program requirements and Clarkson's standards for admission will be accepted into the MBA program

at Clarkson. Students interested in pursuing either program should consult with the Assistant Dean in the School of Business.

#### Pace University Lubin School of Business - MBA

Siena College and the Lubin School of Business at Pace University have cooperated in establishing a 4/1 program that enables the student to earn the undergraduate degree and the MBA in five years. Through careful advisement, students may plan their undergraduate programs to include certain approved foundation courses that serve as preparation for graduate work in management. A Siena graduate meeting the program requirements and Lubin's standards for admission will be accepted into the Lubin MBA Program. Students interested in pursuing such a program should consult with the Assistant Dean in the School of Business.

#### Pace University - MS in Information Systems

Siena College and the School of Computer Science and Information Systems at Pace University have cooperated in establishing a 4/1 program that enables the student to earn the undergraduate degree and the MS in five years. Through careful advisement, students may plan their undergraduate programs to include certain approved foundation courses that serve as preparation for graduate work in computer science and information systems. A Siena graduate meeting the program requirements and Pace's standards for admission will be accepted into the MS program at Pace. Students interested in pursuing such a program should consult with the Assistant Dean in the School of Business.

#### St. John's University

Siena College and The Peter J. Tobin College of Business at St. John's University have cooperated in establishing a 4/1 program that enables the undergraduate accounting student to earn their undergraduate degree and the M.S. in Accountancy or M.S. in Taxation in five years. This arrangement provides the student with a background for advanced professional placement in accounting and satisfies the educational requirements for certification as a CPA in the State of New York. Through careful advisement, the student may plan their undergraduate program to include the necessary courses that serve as preparation for graduate work. A Siena graduate meeting the program requirements and St. John's University admissions standards will be accepted into the M.S. in Accountancy or M.S. in Taxation program. Students interested in pursuing either program should consult with the Assistant Dean in the School of Business.

#### Union Graduate College

Siena College and Union Graduate College have cooperated in establishing a 4/1 program that enables the student to earn the undergraduate degree and MBA in five years. Through careful advisement, students may plan their undergraduate programs to include certain approved foundation courses that serve as preparation for graduate work in management. A Siena graduate meeting the program requirements and The Graduate College's standards for admission will be accepted into the MBA program at Union Graduate College. Students interested in pursuing such a program should consult with the Assistant Dean in the School of Business.

#### Université Laval

Siena College and the School of Business at Université Laval have cooperated in establishing a program that enables the student to earn an internationally recognized MBA degree. This arrangement provides the student with a unique curricular focus in international business in a bilingual environment. Depending on the specialization chosen and its format, the program can be completed in 12 to 24 months. A Siena graduate meeting the program requirements and Laval's standards for admission will be accepted into the Laval MBA program. Students interested in pursuing such a program should consult with the Assistant Dean in the School of Business and the Office of International Programs.

#### University at Albany, SUNY - MBA

Siena College and the School of Business at The University at Albany, SUNY have cooperated in establishing an arrangement that enables the undergraduate student to waive up to ten credits toward The University at Albany, SUNY full-time or part-time M.B.A. program. Through careful advisement, the student may plan their undergraduate program to include the necessary courses that serve as preparation for graduate work. A Siena graduate meeting the program requirements and The University at Albany,

SUNY admissions standards will be accepted into the full-time or part-time M.B.A. program. Students interested in pursuing either program should consult with the Assistant Dean in the School of Business.

MS in Professional Accountancy, MS in Accounting Information Systems, MS in Taxation  
Siena College and the School of Business at The University at Albany, SUNY have cooperated in establishing a 4/1 program that enables the undergraduate accounting student to earn their undergraduate degree and the M.S. in Professional Accountancy, or M.S. in Accounting Information Systems, or M.S. in Taxation in five years. This arrangement provides the student with a background for advanced professional placement in accounting and satisfies the educational requirements for certification as a CPA in the State of New York. Through careful advisement, the student may plan their undergraduate program to include the necessary courses that serve as preparation for graduate work. A Siena graduate meeting the program requirements and The University at Albany, SUNY admissions standards will be accepted into the M.S. in Professional Accountancy, or M.S. in Accounting Information Systems, or M.S. in Taxation program. Students interested in pursuing one of these programs should consult with the Assistant Dean in the School of Business.

### **Engineering Programs**

#### Union Graduate College

This program enables a Siena undergraduate student pursuing a B.S. in Physics, Environmental Science, Computer Science, or Mathematics to complete a UGC M.S. degree in Electrical Engineering, Energy Systems, or Engineering and Management Systems in one additional year (depending on their course load) after completing their Siena undergraduate degree.

Siena undergraduate students must apply for and be granted admission to Union Graduate College no later than the end of the fall term of their senior year. Students are encouraged to apply as early as the end of their sophomore year to facilitate appropriate undergraduate course selection at Siena and graduate course selection at Union Graduate College. A cumulative grade point average of 3.0 is expected for most programs. Acceptance into a program may enable students to apply up to three Union Graduate College 500-level graduate courses for credit in fulfillment of their undergraduate degree at Siena and their graduate degree at Union Graduate College, depending upon their program of study. Siena students have the option to not matriculate with Union Graduate College, and the graduate courses taken will still apply to their BS degree at Siena. Students wishing to apply shall complete the application for admission to Union Graduate College, School of Engineering and Computer Science. Only students that have met the acceptance criteria can register for Union Graduate College courses (see registration form). Registration requires both Siena and UGC advisor approvals.

#### 3/2 Engineering

Siena participates with Rensselaer Polytechnic Institute, Catholic University, Clarkson University, Manhattan College, SUNY-Binghamton and Western New England College in a cooperative science engineering program. The program is a combined five-year sequence which leads to a B.S. degree in chemistry, computer science, physics or mathematics from Siena and a B.E. degree in aeronautical, biomedical, civil, chemical, electrical, industrial, materials, mechanical or nuclear engineering at one of the six cooperating schools. (Not all of these disciplines are available at all of the engineering schools and some additional specialties and variations are available at individual institutions.) A student will attend Siena for the first three years majoring in chemistry, computer science, physics, or math-science. Upon the successful completion of the third year with a clearly demonstrated potential of success in engineering and the recommendation of the Dean of Science, such students would transfer into an engineering program at one of these cooperating colleges. Upon completion of the fourth year, Siena will award a B.S. degree in the appropriate discipline. The student is awarded the B.E. degree at the successful completion of the fifth year. Since available space may occasionally limit the number of applicants accepted in a specific area, students should apply early for transfer and maintain flexibility. To ensure proper course selection, all students should consult both their academic advisor and the 3/2 Engineering Coordinator, Dr. John Cummings, at least once each semester.

A complete description of these cooperative programs (requirements and process and forms) is available with the Siena School of Science, Office of the Dean, and Siena Registrar Office.

## **Law School Programs**

### **Albany Law School**

Siena College and Albany Law School have cooperated in establishing a 4/3 Early Admission Program that will accept applications from students either prior to the start of the freshman year or after the freshman year. Students admitted to the program will be guaranteed admission to Albany Law School upon attainment of their bachelor's degree provided they have satisfied the criteria specified for remaining in the program, which include maintaining a 3.2 GPA during the first three years and a 3.3 cumulative GPA by the end of the senior year. Students interested in the program should consult with the Pre-Law advisor.

### **Pace University Law School**

Siena College and Pace University Law School have cooperated in establishing a 4/3 Program that enables the student at the conclusion of his/her freshman year to apply for acceptance to Pace Law School upon graduation from Siena College, provided the academic standards are met. These include maintaining a 3.20 GPA and a 155 on the LSAT during the Sophomore, Junior and Senior years. Students interested in the program should consult with the Pre-Law Advisor, Dr. Leonard Cutler.

### **Western New England College School of Law**

Siena College and Western New England College School of Law have arranged a 4/3 Program that enables the student at the conclusion of his/her freshman year to be accepted to Western New England College of Law, upon graduation from Siena College and provided academic and fitness standards are met. These include maintaining a 3.30 GPA during the Sophomore, Junior, and Senior years, achieving an established score on the LSAT, a personal interview with a professional admissions staff member, and satisfying character and fitness standards established by Western New England College of Law. Final decisions on acceptance will be made in the first semester of the student's senior year.

Students interested in either program should consult with the Pre-Law Advisor, Dr. Leonard Cutler.

## **Medical and Related Programs**

### **Albany Medical College Program in Science, Humanities and Medicine**

Personally and academically talented high school seniors who have demonstrated a commitment to the service of others will be jointly accepted by Siena and Albany Medical College into a unique eight-year program in medical education. A 3.4 average in the sciences is required to remain in the program. In the junior and senior years at Siena, academic emphasis will be placed on the humanities. Students in this program will be required to declare a minor in one of the humanities or social sciences and will earn a B.A. degree in Biology (see Biology Department listing for specific course requirements). An extended commitment to volunteer service is required of all program participants during the summer between the junior and senior years. Funding is provided for travel and living expenses. Candidates must complete the Common Application and Siena Supplemental Application by December 1 of the student's senior year in high school.

### **Albany Medical College Early Assurance Program for Underrepresented Students**

Albany Medical College will accept two underrepresented students at the completion of the sophomore year. The accepted students remain at Siena and complete their degree in the major of their choosing. To be eligible to apply students must have completed half of the required premedical courses with a 3.2 overall and science gpa. The required courses are: General Biology I & II, General Chemistry I & II, Organic Chemistry I & II, General Physics I & II.

### **SUNY Upstate Medical University. Dual Acceptance**

Upstate Medical University will jointly accept two students per year directly out of high school. Siena's Admissions and Health Professions Advisor will submit names of accepted Siena students to Upstate for interviews. These interviews will take place at Upstate in April prior to the students' enrollment at Siena. Candidates must have a 90 high school average; minimum of 1250 SAT (28 ACT); health related activities; and reside in a rural community in New York State. A minimum MCAT of 30 is required prior to matriculation at Upstate Medical University. Students must maintain a 3.5 undergraduate GPA and score a minimum of 30 on the MCAT.

#### SUNY Upstate Medical University. Early Assurance Program

Students apply during the spring semester of their sophomore year. Acceptances are announced by August. Accepted candidates are expected to complete their bachelor's degree at Siena, maintaining the same academic standards. The program relieves students of the anxiety of the traditional application process. Requirements include (1) 3.5 grade point average, (2) completion of three of the required science courses, (3) recommendation by the Health Professions Committee, (4) 1300 SAT scores and (5) New York residence. Interested students should consult with the Health Professions Advisor. A minimum of 30 is required prior to matriculation at Upstate Medical University. An Interview with Siena's Health Recommendation is required.

#### Lake Erie College of Osteopathic Medicine .Early Acceptance Program

This Agreement establishes an Early Acceptance Program to which Siena College undergraduate students are enrolled jointly by Siena College and by LECOM. The Early Acceptance Program is designed to facilitate the admission of Siena College students into LECOM's Doctor of Osteopathic Medicine program. Once recommended by Siena College, LECOM will interview the student prior to their enrollment at Siena College or within the first two years of being properly enrolled in the program. Students interviewing successfully will be offered a provisional acceptance to LECOM's Doctor of Osteopathic Medicine program. Upon meeting the criteria for final acceptance, they will matriculate at the LECOM campus of their choice. Because this is a demanding professional program, the requirements listed for acceptance have been established to demonstrate that the student is capable of handling the rigorous course load.

#### Lake Erie College of Osteopathic Medicine. Dual Acceptance Program

Qualified High school seniors can jointly apply to Siena and LECOM. Students must have a minimum SAT score of at least 1170 (or an ACT score of 26) and must have a minimum high school GPA of 3.5. Students interview at LECOM during their senior year in high school and Siena is notified of their acceptance. Students must maintain a GPA of 3.4 and 25 MCAT to matriculate at LECOM. Students will enroll at the LECOM campus of their choice: Erie, PA, Greensburg , PA, or Bradenton, FL. completing their first year at Siena. A 3.5 GPA is required for acceptance into the program and continued matriculation. Student may also apply after their sophomore and junior years.

#### Lake Erie College of Dental Medicine Dual acceptance and Early Assurance Program.

Student can apply directly to LECOM's School of Dentistry during their senior year of high school or any time during their first three years of study at Siena. To be eligible for a dual acceptance a student must have a 1200 SAT (26ACT) and have a 3.5 GPA. Students must maintain this level of performance at Siena and obtain the DAT score as required by LECOM. The dental campus is in Bradenton Florida.

SUNY Buffalo School of Dental Medicine. Dual Acceptance. Qualified high school students can apply and be jointly accepted by both Buffalo School of Dental medicine and Siena College. Minimum high school GPA of 3.5 and a SAT of 1200 are required to be offered an interview. Interviews at Buffalo take place during the second semester of the senior year of high school. To remain in the program a GPA of 3.5 is required and the minimum DAT as required by Buffalo School of Dental Medicine.

#### SUNY Buffalo School of Dental Medicine. Early assurance.

Qualified Siena students can apply to Buffalo School of Dental Medicine at the conclusion of the 2<sup>nd</sup> year at Siena. If accepted student must maintain a GPA of 3.5 and the minimum DAT required by Buffalo. A recommendation from Siena's Health Professions Recommendation Committee is required.

#### Salus College of Optometry (Accelerated program)

Siena and Salus College of Optometry (Pennsylvania College of Optometry) offer a time-shortened program leading to an optometry doctorate. Qualified Siena students will be accepted to Salus College of Optometry after completing three years in Siena's accelerated Biology curriculum. Siena will grant the Bachelor of Science degree when the student has completed his or her first year of professional study. Your academic advisor will provide you with a suggested three year curriculum.

#### State University of New York College of Optometry Early Assurance Program

This is an eight year program designed to assure high ability undergraduate students an acceptance into a Doctor of Optometry program at the end of their second year at Siena. Students complete their undergraduate work prior to continuing on to the professional aspects of their program.

State University of New York College of Optometry Dual acceptance.

Up to six students per year may be admitted into a seven year Bachelor of Arts or Science and Doctor of Optometry (O.D.) Program. Students accepted to the Joint Degrees Program are admitted to a designated, prescribed major at Siena College and simultaneously admitted to candidacy to the SUNY College of Optometry's professional program of study. Students complete three years of pre-professional training at Siena College. They will enroll at SUNY Optometry beginning their fourth year. Students will be awarded a B.S. in Biology upon successfully completing their first year at SUNY. Your academic advisor will provide you with a suggested three year curriculum.

New England College of Optometry. (Accelerated Program)

Up to five students a year will be jointly admitted by NECO and Siena College. To remain in the program students must maintain a 3.4 GPA and an average 330 on the OAT with no score below 300. Your advisor at Siena will provide you with a suggested accelerated curriculum.

Lake Erie College of Pharmacy Early Acceptance

Siena College and Lake Erie College of Pharmacy have established three tracts leading to the PharmD. degree. There are 2+; 3+; and 4+ programs. 2+: Exceptional high school students can be accepted by both LECOM and Siena. After completing two years at Siena they begin their professional training at LECOM. No Siena degree is attained. 3+: Students apply to LECOM by February of their freshman year at Siena. After completing the 3-year undergraduate phase they enroll at LECOM. A Siena Degree is obtained at the end of the first year of professional study. 4+: Students apply by February of their sophomore year. They spend all four years at Siena. Continuation in these programs is contingent on maintaining a 3.4 GPA. Professional training on the Erie, PA campus is an accelerated 3-year curriculum; Bradenton, FL campus is a full 4- year curriculum. Students may choose either campus for their training.

Master of Science Degree in Physician Assistant Studies.

Students who wish to pursue the Early Assurance Program ( EAP) that Siena has with AMC- PA Program, the students must have attended Siena since the beginning of their Freshman year and no transfer students will be allowed to apply through this agreement. In the past, this has not been clearly stated in our Early Assurance Program Agreement and we want to be sure that it is clear now to all students. I am working on writing up an addendum to our EAP with AMC so there is no confusion. Albany Med PA program is very firm on this requirement and will only consider students who have been at Siena from the beginning of their freshman yr. Just so you are aware, this agreements allows qualified Siena students to apply to the PA program at the end of their junior year and be considered from a much smaller applicant pool. They find out if they are accepted over the summer btw junior and senior year. Students must have a 3.2 min GPA, have taken most or all of the prerequisites, and have more than ½ of the 1000 hours of responsible health care hours.

Sage Graduate Physical Therapy Program. In order for a student to be allowed to apply through the articulation agreement, they must now have a 3.25 overall GPA and science GPA in the prerequisite courses. The GPA use to be 3.0. Also, students applying through either the articulation agreement or the standard admission path must now apply through a centralized app service called PTCAS and are no longer allowed to apply directly to Sage Graduate school.

Masters in Occupational Therapy. This is a six year program leading to the Master's degree in Occupational Therapy. Students will be guaranteed admission to Sage Graduate School for the MS in OT degree who demonstrate the following: earned baccalaureate degree; minimum overall GPA of 3.00 and minimum science GPA of 2.75; completion of all prerequisite courses, a recommendation from Siena's Health Professions Recommendation Committee; and a successful interview with a representative of the Sage Graduate School. Students apply in January of their junior year.

### **Reserve Officer Training Corps (ROTC) Air Force/Navy**

Students who are interested in Air Force or Naval ROTC may cross-enroll in these programs through the Department of Air and Space Studies or the Department of Naval Science at Rensselaer Polytechnic Institute. Details on these programs is available at <http://www.rpi.edu/academics/rotc.html>.

### **Social Work Masters Programs**

Siena B.A. in Social Work Program/Adelphi University Masters in Social Work Program (advanced standing).

The Adelphi University School of Social Work will grant graduating seniors from the Siena College Social Work Program priority consideration for admission into the Advanced Standing Component of the M.S.W. Program, at the Hudson Valley Center located in Poughkeepsie, NY. This evening / weekend program offers a unique option for Siena graduates, especially those that must continue to be employed while pursuing their MSW degree. To be considered for early admission, in addition to meeting all other general admission criteria, students must have at least a B average overall and a minimum 3.0 in the major, a commitment to social justice, and the concern, caring, and maturity necessary to be a helping professional. Applicants must be strongly recommended by the Siena College Social Work Program Director and/or the Coordinator of Field Education. The recommended deadline for applications to Adelphi's early admissions track is mid-to-late March.

All accepted students will be actively considered for the full range of financial aid that they may qualify for and that may be available including scholarships, loans, and other possible resources.

Siena B.A. in Social Work Program/Fordham University Masters in Social Work Degree Program (Advanced Standing)

The Fordham University Graduate School of Social Service will accept graduating seniors from the Siena College Social Work Program for early admission into the Advanced Standing Component of the M.S.W. Program. To be considered for early admission, in addition to meeting all other general admission criteria, students must have at least a B average overall and a minimum of 3.0 in the major, a commitment to social justice, and the concern, caring, and maturity necessary to be a helping professional. Applicants must be strongly recommended by the Siena College Social Work Program Director and/or the Coordinator of Field Education. The majority of the student's field placement work must be in direct practice. Deadline for submission of applications for the early admissions track of The Fordham University Graduate School of Social Science M.S.W. Degree Program is March 15 of each academic year. The Fordham University Graduate School of Social Service will set aside two places for Siena Social Work graduates in the entering Advanced Standing class each year. This does not, however, preclude the acceptance of more than two qualified students, should more students wish to apply.

Fordham University Graduate School of Social Service will provide a scholarship to one Siena College graduating Social Work student who is admitted through the early admission decision track (\$4,000. annually, \$2,000 per semester). The scholarship recipient must convey a commitment to working with an oppressed population as demonstrated through fieldwork and letters of recommendation. Scholarships will also be provided to any students who demonstrate financial need. All accepted students will be actively considered for the full range of financial aid that they may qualify for and that may be available including scholarships, loans, and other possible resources.

Siena B.A. in Social Work Program/Syracuse University Masters in Social Work Degree Program (Advanced Standing)

Syracuse University School of Social Work will accept graduating seniors from the Siena College Social Work Program for early admission into the Advanced Standing Component of the M.S.W. Program. To be considered for early admission, in addition to meeting all other general admission criteria, students must have at least a minimum overall G.P.A. of 3.0 as well as a minimum G.P.A. of 3.0 in the major, a commitment to social justice and positive social change, and a respect and appreciation for human diversity. Applicants must be strongly recommended by the Siena College B.S.W. Program Director. Deadline for submission of applications for the early admissions track of the Syracuse University School of Social Work M.S.W. Degree Program is February 15 of each academic year. An admission decision will be rendered by March 15. The Syracuse University Graduate School of Social Work will set aside two places for Siena Social Work graduates in the entering Advanced Standing class each year. This does not, however, preclude the acceptance of more than two qualified students, should more students wish to apply. There is no limit on the number of students who can apply for early admission.

Syracuse University Graduate School of Social Work will provide, to up to two students who are admitted through the early admission decision track, scholarship awards (equivalent to at least twelve credits for

the academic year to be distributed between the fall and spring semester). Scholarship recipients must demonstrate activity in advancing the profession's agenda in social justice and/or human diversity and must be strongly recommended by the Siena College Social Work Program Director. Demonstrated financial need as well as academic merit will be considered in the award process. Early notification of scholarship awards is guaranteed to up to two students who have been selected for scholarship awards, provided that they meet the early admission decision deadline. Other early decision applicants will receive notification regarding whether or not they qualify for scholarship funds at a later date. All accepted students will be actively considered for the full range of financial aid that they may qualify for and that may be available including scholarships, loans, and other possible resources.

## **Special Programs**

### **The Franciscan Center for Catholic Studies**

Director: Dr. W.T. Dickens, Professor, Religious Studies Dept.

The Franciscan Center for Catholic Studies (FCCS) is an academic initiative of Siena College that provides a forum for exploring Catholicism in its historical, sociological, liturgical, and doctrinal complexity. In keeping with the Franciscan orientation of the College, the FCCS highlights certain dimensions of Catholicism's past and present embodiments. These include a commitment to social justice, reconciliation and peacemaking; appreciating the natural world; savoring beauty in the creative arts; and defining leadership as service to one's community. To support this mission, the FCCS sponsors or co-sponsors speakers; colloquia; theatrical, musical, and fine arts events; and study abroad.

### **Higher Education Opportunity Program (HEOP)**

Siena co-sponsors The Arthur O. Eve Higher Education Opportunity Program of New York State. As a member institution, Siena is committed to the education of students who are academically and economically disadvantaged as defined by the guidelines of the State Education Department. Applicants to this program must be New York State residents. Students who qualify for admission into the HEOP program receive counseling and tutoring assistance, as well as financial support for their college expenses. Supportive services include a summer session prior to freshman year and continuous academic advising during the completion of the degree program. Candidates for the HEOP program must complete the application, or the Common Application and the supplemental form, by February 15.

### **Kieval Institute for Jewish-Christian Studies at Siena College**

The Kieval Institute for Jewish-Christian Studies at Siena College was founded in 1983 with a gift from Charles and Thelma Buchman, long-time benefactors of the College. The Buchmans assisted in the support of the program and created an endowment to enhance the Institute's work.

The Institute provides a major resource in the Capital Region for the study of Judaism and its historical interrelationships with Christianity. Increased understanding and appreciation of the two faiths come through workshops, seminars and speakers on such topics as "Conflicts Between Jews and Christians," "Vatican II and the Jews — 20 Years After" and "The Church and Israel: The People and its Land."

With the support of the Town of Colonie Jewish Association, the Kieval Institute initiated the annual Town of Colonie Judaica lecture in 2006. Dr. Peter S. Zaas, Professor of Religious Studies at Siena, is the director of the Institute, with a Board of Directors that includes civic and academic leaders of the Roman Catholic, Jewish and Protestant communities. In 2010 Rabbi Rena Kieval became the third chair of the Kieval Institute.

### **The Martin Luther King, Jr. and Coretta Scott King Lecture Series on Race and Nonviolent Social Change**

The Martin Luther King, Jr. and Coretta Scott King Lecture Series on Race and Nonviolent Social Change was established in 1988. It preserves the legacy of the nonviolent human rights movement as it was expressed in the life and teachings of Dr. Martin Luther King, Jr. and has been continued after his death by Coretta Scott King. This lecture series explores how problems such as racism, sexism, classism, militarism, and prejudice in our nation and throughout the world can be confronted effectively through dynamic efforts informed by principles of social justice and nonviolent action. Speakers in the series have included

Harry Belafonte, Eleanor Holmes Norton, Allan Boesak, Ruby Dee, Robert Coles, Sara Lawrence-Lightfoot, Elie Wiesel, Henry Louis Gates, Jr., Marian Wright Edelman, Jonathan Kozol, Cornel West, Johnnetta B. Cole, Lani Guinier, Eric H.F. Law, Bernice King, Joycelyn Edwards, Calvin Butts, Morris Dees, Julian Bond, Bernice Johnson Reagon and Michael Eric Dyson. Lecturers are chosen by a board representing Siena and religious and civic leaders in the Capital Region. Additional information about this lecture series is available at [www.siena.edu/mlk](http://www.siena.edu/mlk).

### **Reinhold Niebuhr Institute of Religion and Culture**

The Reinhold Niebuhr Institute of Religion and Culture, an interdisciplinary, ecumenical, and interfaith community-oriented program, is named in honor of Reinhold Niebuhr, the 20th century Protestant theologian who spent a lifetime exploring the implications of religious faith for the public order. It sponsors lectures, workshops, and discussions on topics in which the interests of religion, ethics, and society intersect. In recent years these have included nuclear disarmament, economic justice, interracial justice, and gender and society.

Among the distinguished lecturers and artists the Institute has sponsored or co-sponsored are: J. Bryan Hehir, Robert Jay Lifton, Alan Geyer, Kenneth Himes, Shirley Chisholm, Gar Alperovitz, Bishop Thomas Gumbleton, Bishop C. Dale White, Mark Gerzon, Coretta Scott King, James B. Nelson, Mary Frances Berry, Michael Kimmel, Pam McAllister, C.T. Vivian, Joseph Lowery, Carter Heyward, Vinie Burrows, Will D. Campbell, James M. Lawson, Jr., Gene Sharp, Donald Woods, Margaret Randall, Cesar Chavez, Harry Belafonte, Nechama Tec, Jessica Stern, Sylvia Washington, Mark Taylor, David Kaczynski and Gary Wright.

### **Siena Leadership Institute**

#### **“Developing Leaders with Competence and Character”**

The Siena Leadership Institute (SLI) complements Siena’s traditional academic programs by preparing students to assume leadership roles and responsibilities in their communities through experiential learning and service opportunities. The SLI assists students in developing a sound character and establishing personal moral and ethical standards that are rooted in the Franciscan tradition; thus, empowering them to shape their own future and become tomorrow’s leaders.

The Leadership Institute at Siena emphasizes the Franciscan values of service and community building, by encouraging students to become agents of change for improving their world through a commitment to service.

The SLI is a one-year experience for selected Siena Sophomores, designed to develop skills and abilities that will enable participating fellows (students) to be more effective leaders and citizens in their communities and continue to live the Franciscan ideals by serving as voices of reason, conscience and compassion in society. In this intensive and personalized program, students will learn about leadership through workshops, seminars, experiential learning activities, community service and mentoring relationships.

### **Siena Research Institute**

Dr. Donald P. Levy, *Director*

Founded in 1980, the Siena Research Institute (SRI) conducts regional, statewide and national public opinion and expert surveys on business, economic, political, social, academic and historical issues.

Each month, Siena Research Institute (SRI) conducts a statewide survey used to measure New York State consumer confidence. Based upon the University of Michigan’s national consumer sentiment index, SRI’s monthly survey of consumer confidence is the only study of its kind that measures willingness to spend in New York State. SRI also produces a quarterly report on consumer confidence in nine metropolitan statistical areas (MSAs) - Albany, Binghamton, Buffalo, Mid-Hudson, New York City, Rochester, Syracuse, Utica and, added in January 2009, Long Island - that is reported in *The New York Times* and several regional newspapers, and relied upon by many businesses and government agencies.

Each month SRI also conducts the Siena New York Poll, a “snapshot” poll of registered voters. This monthly survey gives voters the opportunity to voice their opinions on political and social issues impacting New York State residents. Past topics have included favorability of public officials, likelihood to vote for specific

candidates and policy questions such as support or opposition for licensing of illegal immigrants and the proposed Soda Tax. Widely cited by print, electronic and broadcast media, the Siena New York Poll is firmly on the pulse of politics among New Yorkers.

Recently SRI has broadened its mission in an effort to measure and chronicle “The Fabric of Life in New York.” Components of that independent research agenda include: Siena New York Sport Poll, Life Satisfaction in New York, The Social Capital Study of New York State, and The Yearly Holiday Spending and Giving Study. This research has expanded into a web panel that stretches across geographies and demographics not easily reached in the past.

In a further effort to support the mission of the college, SRI launched the “Healthy Communities Program” in February 2009. This research focuses on self-assessment of health, actions that support that self assessment and resources in the community that could foster healthy communities. The goal of this research is to bridge the gap between education and action.

SRI is frequently commissioned to conduct surveys for organizations, businesses, and local and state government agencies. Recent clients include: Healthcare Association of New York State, First Niagara Bank, Patricia Lynch Associates, Queens County District Attorney, NYS Bar Association, NYS Office for the Aging, Ellis Hospital, Behan Communications and St. Pius Parish.

Siena Research Institute is a member of the American Association for Public Opinion Research (AAPOR), and subscribes to its code of professional ethics and practices; the American Statistical Association (ASA) and the Association for University Business and Economic Research (AUBER).

### **The Siena Community Office of the College Chaplain**

The Office of the College Chaplain ministers to the spiritual needs of Siena’s students, faculty, staff, and alumni. It plays a crucial role in nurturing and communicating the Catholic and Franciscan identity of the College. As a Catholic educational institution, Siena strives to make conscious connections between faith and reason, between the quest for knowledge and the thirst for God, and between the examination of new ideas and an ever-deepening appreciation for the ancient wisdom of our Judeo-Christian tradition. As a Franciscan college, Siena grounds its approach to education in the conviction that the pursuit of truth in every academic discipline leads the seeker to the God of truth. St. Francis of Assisi believed, and his followers concur, that the exploration of the world in all its wondrous beauty and infinite variety is a prelude to divine praise, and everything that is genuinely human is a possible encounter with the God-made-human, Jesus Christ. The Chaplain’s Office seeks to promote these Catholic and Franciscan values in higher education.

The Office of the College Chaplain is located behind St. Mary of the Angels Chapel and adjacent to Hines Hall. Office hours are from 8:30 a.m. to 4:30 p.m., Monday through Friday. St. Mary of the Angels Chapel is open 24 hours a day for personal prayer and meditation. In addition, the Chapel of the Holy Name of Jesus, located in the Sarazen Student Union, provides a more intimate setting for quiet reflection, and is open during the regular operating hours of the Student Union.

The celebration of the Eucharist is the heart of the spiritual and religious life of Siena College. The Eucharistic Liturgy is regularly celebrated on the Sundays of the academic year at 11:00 a.m. and 7:00 p.m. in St. Mary of the Angels Chapel, and at 5:00 and 10:00 p.m. in various residence halls. Weekday Masses are celebrated at 12:30 p.m. in St. Mary of the Angels Chapel. All are welcome to these celebrations.

Catholic students are encouraged to take an active role in the liturgical ministries of the Chaplain’s Office, and to serve the worshipping community as Lectors, Eucharistic Ministers, Greeters, and Acolytes. Students with musical ability are welcome to join the music ministry of St. Mary of the Angels Chapel. Students of other religious traditions who wish to worship with their own faith communities or to seek the spiritual counsel of their respective spiritual leaders should contact the Chaplain’s Office for appropriate referral and, if needed, assistance with transportation.

Building a Christ-centered community of faith is central to the mission and ministry of the Chaplain's Office. Working closely with the community of friars at Siena College as well as the Franciscan Center for Service and Advocacy, the Chaplain's Office offers a wide variety of programs and events that serve to make the vital connection between Christian faith and everyday life on a college campus. Through liturgical celebrations, prayer services, small faith-sharing groups, bible study, retreat experiences, community service opportunities, and the Rite of Christian Initiation of Adults (where students sponsor other students who wish to enter more deeply into the life of the Catholic Church), the Chaplain's Office hopes to create an environment where one can grow in deep personal relationship with God, in intelligent reflection on one's faith, in active witness to the good news of Jesus Christ, and in selfless service to one's sisters and brothers in the world.

### **The Franciscan Center for Service and Advocacy**

The Franciscan Center for Service and Advocacy serves as the College's principal vehicle for promoting service with others, particularly among the poor and marginalized, as a Franciscan value and civic virtue. The Franciscan Center offers an extensive volunteer service program for individuals (and groups) at more than eighty human service agencies and organizations in the Capital Region. The Center hosts a "Volunteer Service Fair" at the beginning of the fall and spring semesters, providing the opportunity for the Siena community to meet representatives from the various agencies and organizations, to learn about the needs in the local community and to choose placements for volunteer service.

The Franciscan Center offers unique and special programs, academic courses, seminars, and service immersion trips to help students connect their personal experiences of service among the poor with knowledge of social problems (e.g. hunger, poverty, homelessness) and Catholic Social Teaching and to encourage students to get involved in addressing issues of justice and peace.

A minor in Franciscan Service and Advocacy (which includes a seminar and internship) is offered as part of the College's academic program (consult the section on "Multidisciplinary Courses and Minors").

The Franciscan Center sponsors the Siena Mentoring Program that provides one-on-one mentoring for about fifty children from inner-city Albany who come to campus every Saturday (when school is in session). Siena students are matched with a "little brother" or "little sister" for a variety of supervised programs and activities. The Siena Mentoring Program offers a Wednesday program for children from St. Casimir's Regional School in Albany. The school does not have a gymnasium, so Siena students and Athletic Department administrators have opened the Marcelle Athletic Center courts for their use on Wednesdays during free period, for kindergarten to eighth graders. Siena students serve as mentors and positive role models for these children. In addition, the Siena Mentoring Program offers a Summer Enrichment program bringing forty to fifty children to campus for various academic, social and recreational activities during July and August. Our Siena community provides the wonderful gift of guidance, support and friendship with children who reside in the inner-city.

The Franciscan Center strives in all its programs and activities to help students to integrate the academic, the spiritual and the experiential.

For more information about the Franciscan Center for Service and Advocacy, please contact the Director at 783-2333 or visit our web-site: [www.siena.edu/fcsa](http://www.siena.edu/fcsa).

### **Student Life**

A major influence on the total development of the Siena student is the campus environment that fosters the growth of the body, mind and character of each individual. There are a wide variety of educational, social and cultural programs that provide opportunities for experiences that complement the academic program of the College and that foster the acquisition of a liberal arts education.

To assure that the campus environment remains one conducive to student development, the Code of Conduct for Students sets forth the minimal principles that should guide the behavior of all students, so that the campus serves as a place where students can pursue knowledge in an atmosphere conducive to individual growth. The Code is published in the student handbook, Siena Life. Each student is expected to obtain a copy of the current handbook and know its contents. Siena Life is also available on the web at [www.siena.edu/sienalife](http://www.siena.edu/sienalife).

### **Student Government**

Students may take an active role in campus affairs through involvement with the Student Senate, Student Events Board, Hall Councils or one of 70+ student organizations.

The Student Senate includes 23 elected or appointed representatives from the classes, residence units, the commuting population and from the student body at large. The senate represents the student body with matters concerning student life on campus.

The Student Events Board consists of 32 elected or appointed representatives and coordinates many extracurricular and co-curricular activities on campus.

Each residential area elects representatives to their respective hall council. The hall councils assist in the coordination of social activities within each residence unit. In addition, each class year elects representatives to serve on the Student Senate and the Student Events Board.

### **Student Activities**

The program of extracurricular and co-curricular activities is sufficiently varied to offer a wide appeal. There are more than 70 student organizations chartered by the Student Senate.

The Promethean, the student newspaper, Saga, the yearbook, and Pendragon, the literary magazine, provide publication opportunities. WVCR-FM, the campus radio station, provides opportunities in broadcasting, and Stage Three offers experiences in acting, stage management and production.

The student activities closely aligned to academic life include, but are not limited to, the Political Science Society, the Accounting Students Association, the Education Club, the History Club, Harvard Model United Nations, the Finance and Business Societies, the Biology and Chemistry Clubs, and the Computer Science Club.

Siena sponsors club sports programs that compete with teams from other colleges and universities. Some of the club sports that have been offered include men's hockey, rugby, karate, equestrian, and volleyball. The men's club hockey team has been a fixture in postseason play in the past.

#### Weekend Activities

Student organizations, Residential Life Staff, the Damietta Cross-Cultural Center, Class Councils and the Student Events Board regularly sponsor events throughout the academic year that include on campus performances of musicians and entertainers, dances, dinners, speakers, and a variety of community social events. In addition, many of the student groups and departments host a variety of off-campus events in the surrounding communities.

Significant activities each year include New Student Orientation, Family Weekend, Winter Weekend, Siblings' Weekend, Charity Week, and Sienafest.

#### Dramatics

Stage Three, the campus theatre company, presents four major productions and a series of special events in cooperation with the Department of Creative Arts Theatre Program. The shows are cast and staffed from the Siena community and are directed and designed by professionals from Siena's theatre faculty, guest artists and qualified students. The use of guest artists in various capacities provides students with the opportunity of observing and interacting with theatre professionals from outside the campus community in the production process.

Members of Stage Three come from almost every major and are involved not only in campus productions but also in community service projects, presentations and workshops.

Stage Three is governed by a five-member board, nominated and elected by the general membership. Artistic direction and advisement are provided by the Theatre Program faculty and staff.

Stage Three members participate in the season selection process with the Theatre Program faculty and strive to achieve a diverse offering of theatrical productions each year. Recent productions include *Doubt*, *A Midsummer Night's Dream*, *Drood*, *How I Learned to Drive*, *The Diary of Anne Frank* and the world premieres of *Monster Island* and *Abbotts' Dance*. Stage Three will also produce a performance that reflects on positive goals for campus life at Siena for the new student Orientation in the fall.

### Music

In addition to its regular academic offerings the music program at Siena also offers opportunities for students to participate in orchestral and vocal ensembles in public performance. The Siena Chamber Orchestra and the Siena Chorus are two examples of courses offered for credit and designed with public performance as course objectives.

The Creative Arts Department cooperates with Stage Three, the student theatre company, in producing musical works from the American musical theatre.

In support of extracurricular activities, the department sponsors field trips each semester to New York City arts events such as opera, ballet and Broadway shows.

The Siena Music Series and the Franciscan Chamber Orchestra bring professional musicians to the campus to present concerts and to offer workshops for students. The Music Series collaborates with other professional groups in the Capital region and has performed at the Troy Music Hall and the Cathedral of the Immaculate Conception.

### **Athletics Program**

Athletics and recreation at Siena College are an integral part of the educational experience. Siena's varsity teams compete at the NCAA Division I level as a member of the Metro Atlantic Athletic Conference, with the exception of field hockey which is a member of the Northeast Conference. The department has a rich history of producing championship teams and student-athletes who excel in and out of the classroom.

Siena sponsors 18 NCAA Division I sports: baseball, men's and women's cross-country, field hockey, men's and women's golf, men's and women's lacrosse, men's and women's soccer, softball, women's swimming and diving, men's and women's tennis, women's volleyball, and women's water polo.

The athletic department has been recognized annually for the academic accomplishments of its student-athletes. Siena College has ranked in the top 10 percent nationally in each of the NCAA's first five Graduation Success Reports, tying for the fifth highest rate (95%) this past year.

Athletically, the men's basketball team has been a source of great pride to the College and Capital Region community. The Saints advanced to the NCAA Tournament in 2010 for the third straight season and sixth time in program history (1989, 1999, 2002, 2008, 2009 and 2010). They were the only program in the country to win their conference regular-season and postseason tournament championships in 2008, 2009, and 2010. In 2009, the Saints topped Big Ten power Ohio State 74-72 in a double overtime thriller in the First Round in Dayton, Ohio before losing at the wire to top overall seed Louisville. In 2008, the Saints also advanced to the Second Round, by defeating SEC member and #4 seed Vanderbilt 83-62 in Tampa, Fla. In 1989, Siena defeated #3 seed Stanford in Greensboro, N.C. The Siena men have also enjoyed great success in the postseason NIT, appearing in five Tournaments highlighted by a magical run to the semifinals at Madison Square Garden in 1994.

The men's lacrosse team has also emerged as a national player. The Saints advanced to the NCAA Tournament for the first time in 2009 and completed their second consecutive undefeated MAAC regular season championship in 2010. The Saints also advanced to the NCAA tournament in 2011.

The women's basketball team has had great success as well. Siena has won or shared the MAAC regular-season title seven times since joining the conference in 1990. The Saints won the 2001 MAAC Championship to earn their first NCAA appearance and have appeared in the WNIT three times (1999, 2002 and 2003). The Saints beat Big East members Georgetown and Seton Hall in the first Rounds of the WNIT in 1999 and 2003 respectively.

Additionally, the volleyball, men's and women's golf, and baseball teams have won multiple MAAC Championships. In 2008, the volleyball team won its fourth straight and eighth overall MAAC crown with a dramatic title match victory over rival Fairfield on ESPNU. The Saints made their fourth straight trip to the NCAA Tournament where they lost to California in Berkeley.

The baseball team has won four MAAC regular and postseason titles and made its first NCAA appearance in 1999. The Saints advanced to the MAAC Championship game in 2008.

The men's basketball team averages over 7,000 fans per home game at Times Union Center in downtown Albany, just minutes from campus. The community and student support is among the best in the nation for a mid-major program and the Saints regularly are among the top drawing programs in the Northeast.

Along with the TU Center, other venues include a new artificial turf field on-campus which serves as home for the field hockey, men's soccer, and lacrosse programs along with various intramural activities. UHY Court at the 4,000-seat Alumni Recreation Center is the home facility for the women's basketball and volleyball teams.

Siena's intramural program offers full experiences in a variety of athletic areas. Typical offerings include: basketball, flag football, volleyball, bowling, golf, indoor soccer, roller hockey, racquetball, and others. Competition is between students and nearly 50 percent of the student body participates in intramural activity.

The Marcelle Athletic Complex is home to all recreational activities that take place on campus. The MAC features a field house with four full-size basketball courts, an elevated running track, four racquet sports courts, aerobic room, fitness area featuring Atlantis weight lifting equipment, and a free weight room.

Concerts

The Student Events Board regularly sponsors major concerts on campus and in local theaters. Recent national recording artists include Gavin DeGraw, Eve 6, Guster, Lifehouse, Billy Joel, Natalie Merchant, Rusted Root, Third Eye Blind, The Temptations, The Four Tops, The Mighty, Mighty Bosstones, Blues Traveler, the Goo Goo Dolls, and comedians Bill Cosby, Chris Rock and Mario Joyner.

### **Guest Lecturers**

To further stimulate the intellectual and cultural life of the Siena community and to encourage participation with the faculty and students of other institutions, noted lecturers and speakers are brought to the Siena campus.

Among the lecturers appearing at the College recently were former NFL player Esera Tuaola, author Dith Prahm, former Haitian President Jean-Bertrand Aristide, John Ratzenberger of "Cheers," Spike Lee, Philip Agee, Rita Marley, Chai Ling, Sharon Pratt Kelly, Fr. Joseph Girzone, former Buffalo Bills head coach Marv Levy, Omarosa from the television series "The Apprentice," and "The Simpsons" writer David Silverman and "Curb Your Enthusiasm" writer Allen Szwibel.

### **Residential Life**

Siena College provides a variety of on-campus housing accommodations in Hennepin, Hines, Padua, Plassmann, Ryan and the Townhouses. First year students are typically assigned to doubles, triples and quads in Hines, Plassmann and Ryan. Returning students will have the opportunity to select from all remaining housing in doubles, quads and 4, 6 or 8 person townhouses.

The Residential Life staff is charged with fostering a safe and healthy living environment on campus that enhances the Franciscan, Catholic, and academic mission of the college. The Director of Residential Life oversees the Residential Life program at Siena. The Assistant Directors of Residential Life collectively coordinate educational and programming efforts, along with housing assignments, vacation closings and card access. In each residence area, there is a Residence Director, a live-in professional staff member charged with the administrative responsibility for all residents and the facility. Additionally, they provide personal, social and academic guidance to assist with student concerns/development. Resident Assistants are returning student leaders residing in each residential area who promote the College/Departmental

mission by serving as a resource to students through programming, making referrals, and serving on duty. Friars in Residence are men who reside in each residence hall and provide support for both resident students and the residential life staff. The Facilities staff provides a safe and clean environment for the common areas.

Student eligibility for on-campus housing is determined at the point of admission to the College. Housing spaces are allocated each year for new freshmen and, to the extent spaces remain available, for new transfer students. Acceptance of admission to the College as a resident student indicates acceptance of the offer of housing by the College.

To the extent space is available, it is expected that resident students will live in college housing and participate in a College board plan for the entire time of their enrollment at the College. Exceptions to this residency requirement include: students admitted to the college as commuters and residing within a 60 mile radius, independent students, and others who receive a written waiver prior to matriculation from the Assistant Vice President for Admission. Each year students are required to sign a housing license which is binding for one academic year (fall and spring semester) except for students graduating at the end of the fall semester, studying abroad, or entering residence for the spring semester.

If you wish to appeal the residency requirement at any time you must submit a Petition for Release form to the Assistant Director of Residential Life. The appeal should be a request to be contractually released from the Housing/Food Service requirement. Reasons for appeal may include but are not limited to: particular medical health needs, changes in your personal or financial circumstances, or to review a first year freshman's request to change to commuter status as defined by the student handbook, Siena Life.

### **Motor Vehicle Registration and Traffic Violations**

All vehicles must have a Siena College permit to park on campus. Students must park in designated lots. See "Siena College Traffic Rules and Regulations" for detailed information and a map. The Traffic Rules and Regulations can be found on the Siena College website under Public Safety. A hard copy may also be obtained at the Department of Public Safety. Resident freshmen are not permitted to have a vehicle on campus. A request for an exception to the College's, "No Resident Freshmen with Cars Rule," may be requested from the Director of Public Safety. Exceptions are granted for medical reasons (for students to obtain medical treatment) and for employment (normally for 20 hours of employment per week). All resident freshmen exceptions must be requested and approved prior to bringing a car on campus.

#### **Registration of Motor Vehicles**

- a. All students must register their motor vehicles with the Department of Public Safety. Upon presentation of a State Department of Motor Vehicles registration, your college I.D. and the pre-registration form, a parking permit will be issued. The permit must be affixed to the rear side window on the driver's side of the vehicle.
- b. There is a registration fee required for each vehicle registered.
- c. Registering the vehicle of another student, for any reason under a false name, will be considered falsification of registration and subjects the individuals involved to a fine of \$100 each and the loss of the privilege of having a vehicle on campus.
- d. Resident freshmen are prohibited from having vehicles on campus, and those found to have a vehicle being kept on campus without prior authorization are subject to a \$100 fine and disciplinary action.

#### **Temporary Parking Permits**

Temporary parking permits are issued in accordance with Siena's Parking Rules and Regulations. Resident freshmen must obtain permission for a temporary parking permit from the Director of Public Safety, prior to bringing a vehicle to campus. Temporary permits for freshmen must meet the same qualifications as a Resident Freshmen Parking Permit, that is medical and employment as explained above. Temporary permits, except for freshmen, may be obtained 24 hours a day, seven days a week, at the Public Safety Department on the North side of campus in the Plant Operations Building. Permits are issued to visitors and students who demonstrate need and who would otherwise be entitled to possess a regulations parking permit.

### **Traffic Appeals Committee**

The purpose of this Committee is to hear appeals regarding tickets issued by the Department of Public Safety. The Committee consists of a member of the Administration, three students appointed by the Student Senate, and the Assistant Director of Public Safety as the Chair.

Students wishing to appeal a ticket issued to them should follow the procedures outlined on the Security Department's webpage, <http://www.siena.edu/publicsafety>.

## **Student Services**

### **Orientation**

Orientation is designed to acclimate new students and families to the campus environment. The extended orientation program consists of three phases. New students participate in Phase One in the days that lead to the start of the fall semester. During this time students are moved into the residence halls, commuters are checked in at the Sarazen Student Union, and all first year students participate in a four day introduction to the Siena community, its resources, and their peers. Phase Two, an optional program, consists of both on and off campus activities throughout the day before classes begin. Phase Three, Family Weekend, welcomes the parents and families of the class back to campus in early October.

Transfer students are also strongly encouraged to attend the Transfer Student Orientation Program designed specifically for them. This single day program includes opportunities to learn more about campus services and how to access them, meet other transfer students and members of the college community. Notification about this program is available on the college website and via direct mail to confirmed transfer students.

### **Commuter Students**

A commuter lounge is located in the Sarazen Student Union, just off of the student lounge. Concerns of commuting students are addressed by the Student Senate, the Commuter Student Council, and the Office of Campus Programs. Representatives from the commuting population attending the College are elected to sit on the Student Senate and Student Events Board.

### **Dining**

During the academic year when the residence halls are open, Serra Hall provides meals for all resident students. There is a variety of meal plans available to resident and non-resident students. Meals are served according to the following schedule except during academic holiday periods:

Monday - Thursday: ..... 7:30 a.m. - 7:30 p.m.  
Friday - Sunday: ..... 7:30 a.m. - 7:00 p.m.

### **The Sarazen Student Union**

The Sarazen Student Union is the facility provided for the extracurricular activities program and an area in which students can relax, socialize and study. It includes spacious lounges, meeting rooms, internet stations, Pepsi Café, Student Lounge, Promethean, SAGA Yearbook, student government offices, multicultural center, commuter lounge, Information Desk, the post office, the Damietta Cross-Cultural Center, Residential Life, Campus Programs Office, Saint Card Office, and Office of the Vice President for Student Affairs. The Sarazen Student Union is open daily except during academic holiday periods. The Pepsi Café offers snacks, lunches, dinners, Sub Connection Sandwiches, beverages, Pizza, Good-To-Go Salads.

Pandini's and Sub-Connection

Sunday through Thursday 5:00 p.m. - Midnight

Pepsi Café

Monday through Friday 8:00 a.m. - Midnight

Saturday 11:00 a.m. - Midnight

Sunday 5:00 p.m. - Midnight

### **Damietta Cross-Cultural Center**

Damietta Cross-Cultural Center's mission is to foster campus-wide, cross-cultural competency in the service of a just world. Damietta was a city in Egypt where St. Francis of Assisi and Sultan Malik al-Kamil met in September of 1219. For several days in the midst of war between competing cultures and religions, these two men sat down together and searched for common ground. Their meeting changed their attitudes, altered their perspectives

and influenced their subsequent behavior. It left them mutually enriched. It also left us with a legacy of respectful and meaningful dialogue. It is this 800 year-old tradition, bestowed on us by a Catholic Christian saint and a Sunni Muslim sultan, which the programs and services of the Damietta Cross-Cultural Center seek to honor and advance at Siena College.

At the heart of the Center's mission is the acknowledgement that we are all members of the human family regardless of our race, ethnicity, gender, sexual orientation, religious affiliation, ability and socio-economic status. Within the Christian tradition, there are duties and responsibilities associated with being a member of the human family. The Gospel challenges its adherents not only to love their neighbors but to love their enemies as well. St. Francis called *all* whom he met his brother and sister, thereby expressing two convictions. First, we are all related; we are part of one human family. Second, because we are brothers and sisters, we are called to love one another. It is this profoundly relational dynamic that animates the work of the Damietta Center.

The Damietta Center's programs are based on the best practice of cultural competency research, student development theory and social justice education. The development of cross-cultural competence focuses on addressing the perceptions, attitudes and behaviors of students. We provide experiences of the effects of prejudice and inequality in our world, and lead students to become agents of social justice. The Center's cognitive and affective co-curricular programs, at times in conjunction with in-class learning, foster a campus-wide environment that encourages our students to engage, respect and love all people as brothers and sisters.

The Damietta Center uses a peer-to-peer educator model for its programming and advocacy. These peer-to-peer educators are called Damietta Community Solidarity Advocates. Damietta Community Solidarity Advocates are students who work at the Damietta Center and who have been trained through seminar-style workshops to be group facilitators of peer discussions on structural racism and other forms of bias-related injustice.

The Damietta Cross-Cultural Center is located in Sarazen Student Union, Room 302.

### **Sr. Thea Bowman Center for Women**

The Sr. Thea Bowman Center for Women, located in new Hall, Room G33, is a welcoming place complete with comfortable chairs, couches and refreshments. The Center provides leadership and education to members of the Siena College community by promoting awareness about gender issues affecting women and men. Grounded in the Franciscan and Catholic traditions, the Center provides information, education and referral to students with the goal of enhancing the educational, personal, professional, and spiritual growth of women at Siena.

Annual and on-going events: Breast Cancer Awareness and Fund Drive, Movie Series, Graduate School and Family Choices Forum, Rape Aggression Defense (RAD) course, Kickboxing and Yoga classes, Supporting Fair Trade Sale, Make a Card for Someone in Need, Cinderella Project, Women and Alcohol, Women and Eating Disorders and programming in the residence halls.

For more information, please call (782-6109) or visit the web site at [www.siena.edu/womenscenter](http://www.siena.edu/womenscenter).

## **Center for Counseling and Student Development**

### **Overview of the Center**

The Center for Counseling and Student Development (CCSD), strives to help students cope more effectively with personal, emotional and situational barriers to learning; improve students' adjustment to unavoidable stress; and contribute to their personal growth and development by providing psychological support and guidance. This is accomplished through the provision of counseling services for enrolled students and secondarily by offering psycho-educational programming and consultations to the campus community.

### **Why might a Student meet with a Counselor?**

College life brings many opportunities as well as challenges that are often stressful. Students experience those challenges in a number of different areas—some students have difficulties adjusting to the changes in academic demands from high school to college, others experience confusion in deciding on a major or career path, and still others struggle with issues in their families and relationships. Most students feel anxious, depressed, or confused at some point during their college experience. Support often comes from

friends, family members or significant others, but in many cases a trained professional can be the most effective source of support.

In fact most of us, at some time in our lives, feel overwhelmed and could benefit from talking with someone objective who won't judge us, and who will help us to see new alternatives. Thus, the primary goal of the Center for Counseling and Student Development is to provide students with psychological support and guidance toward finding more effective coping strategies. Counseling can be a key experience in the attainment of the skills essential to academic and personal success.

The Center is available to all registered students. There are no fees for our services as the cost is already built into your yearly fees. Faculty and staff may request a consultation.

### **How To Make An Appointment**

Appointments may be made in person or by calling 518-783-2342. We do not make appointments through email. We are located in Foy Hall, Room 110.

Office hours are:

8:30-4:30 p.m., Mon.-Fri. (closed 12-1)

8:30-4:00 p.m., in the Summer (closed 12-12:30)

Appointments are scheduled as soon as possible. Be sure to let our receptionist know if your situation is urgent, and you need to speak with a counselor immediately.

In certain situations, the needs of a student are beyond what the Center staff can provide. In those instances, our role is to facilitate access to the appropriate services. Please note that services are limited during the summer months.

### **Statement of Confidentiality**

Information shared in a counseling relationship is confidential with the following exceptions: when your counselor believes you are in imminent risk of harming yourself or another person, or when your counselor believes that a child is being abused. We must also comply with court orders to release information. In all instances every effort is made to do so in ways that will be least disruptive to our clients. Additionally CCSD may at times disclose information that could impact the safety of the larger college community.

For more information please visit our website at: [http://www.siena.edu/counseling\\_center](http://www.siena.edu/counseling_center).

### **Academic Support Services Academic Advising Support Center**

Siena College recognizes academic advising as a critical component of the educational experience of its students. Academic advising is a process of problem-solving and decision-making through which a student explores and seeks information from professionals of the campus community. It is marked by a dynamic relationship between proactive students and advisor/mentors who act as teachers and guides in this interactive partnership. Students are assigned a faculty advisor in their declared major or for undeclared students, a faculty member in the School within which they are declared. In addition, the Academic Advising Support Center provides professional advising to any student needing drop-in assistance, help with college procedures, advising concerns or when a faculty advisor is unavailable. In this way, the college facilitates high quality academic advising for all Siena students. We are located in Siena Hall 215.

### **The Writing Center**

The staff of the Writing Center offers free, one-on-one assistance to all students, faculty, and staff at Siena. Knowledgeable, highly-trained, and compassionate peer writing consultants provide objective, critical responses to assignments and projects across the disciplines and at any stage in the writing process. Regardless of the assignment, consultants can help writers generate ideas, organize an argument, clarify purpose, or identify an audience. We teach strategies for writers to use when revising their own work, and though we do not edit, correct, or "fix" technical problems, we can address those that reoccur throughout a

text. We strongly encourage writers to visit the Writing Center several days prior to when the project is actually due and to plan for follow-up appointments.

Our staff is available to work with ALL writers: less-experienced and apprehensive writers who may need to work on basic writing skills and techniques as well as more advanced ones looking for constructive feedback. For students reading, writing, and speaking English as a second language, our staff includes a professional ESL instructor who can help with any type of assignment or even with non-academic communication issues.

Additional information about our mission, services, and hours of operation is posted at [www.siena.edu/writingcenter](http://www.siena.edu/writingcenter). The Writing Center is located in L09 on the lower-level of the Standish Library. Walk-ins are welcome, but appointments are highly recommended and can be scheduled online or by telephoning 783-4125. You can contact the Director of the Writing Center, Dr. Michelle Liptak, at 782-6510 or [mliptak@siena.edu](mailto:mliptak@siena.edu).

### **Tutoring Services**

Tutoring Services are available to all currently registered students at Siena College. The office is located Siena Hall 215. Tutoring Services provides group and individual peer tutoring during both the fall and spring semester. Summer tutoring is available by special arrangement.

While most students view tutoring as a mechanism for ‘fixing’ difficult coursework, Tutoring Services can be much more proactive in a student’s academic success. Participating in a group tutoring session can clarify formerly difficult concepts, provide additional study time and connect students with study partners. When used this way, tutoring enhances academic performance and improves success rather than just ‘fixing’ problems. Students, therefore, are encouraged to use Tutoring Services’ Group Sessions often.

Students may attend any or all of the group tutoring sessions offered. This service is free to all currently registered students at Siena College, i.e. part-time or full-time, matriculated or non-degree.

### **Health Services**

The Siena College Health Service provides medical care for common health problems, health maintenance and health education. Services are provided by certified nurse practitioners in collaboration with a physician consultant, and registered professional nurses. The Siena Health Service Office is located on the lower level of the Marcelle Commons Building in Townhouse Complex. Clinic hours are Monday-Friday 8:30 a.m. – 4:30 p.m. while classes are in session. For more information, please contact the Health Service at (518) 783-2554.

### **Health Insurance**

All full time students are required to have health insurance. Full time students that do not have health insurance will be billed for and receive insurance through the Aetna Student Health Policy. If a student has health insurance coverage, they will be required to complete an online waiver verifying their coverage. It is recommended that before a waiver is processed, students will check with their health insurance provider to determine what limitations there may be for coverage in the Albany area. Many plans do not provide benefits “out of network” and many networks do not extend to the Albany area. If this is the case with your health insurance coverage, it is suggested that you do not waive the Aetna Student Health policy. Part time students may voluntarily enroll in the Aetna Student Health Insurance plan.

### **The Office of Services for Students with Disabilities**

Siena College values the uniqueness of all students and is committed to supporting students with documented disabilities in order to provide them with reasonable accommodation that meets their individual needs. Students with disabilities are encouraged to register with the Office of Services for Students with Disabilities in Foy Hall upon acceptance to the college. Although students may choose to register at any time, accommodations are not retroactive. It is recommended that students register prior to July 15th for fall enrollment or December 15th for spring enrollment. To register with this office, a student must complete a student data sheet, release form, and provide current, comprehensive documentation of his/her disability. The office will determine the appropriateness of all documentation. Documentation must adequately represent the student’s current level of functioning as well as

demonstrate the existence of a disability as required by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

All information disclosed during the registration process is considered private and will not be released without the student's written permission. The college provides reasonable accommodations to all students with disabilities. Students are encouraged to meet with the Director of the Office of Services for Students with Disabilities to develop an individualized accommodation plan.

## **The Career Center**

### **First Year and Second Year Students Get an Early Start in Exploring Careers**

***Many students think career planning is just for seniors. Not so – it's a process that should begin early in your undergraduate career.***

- Consider completing career assessments such as MBTI®, Strong Interest Inventory® and Do What you Are® to learn more about yourself and begin exploring career options.
- Meet with a Career Counselor to discuss your interests, values & skills.
- Utilize Reference USA™, LinkedIn and other research databases for career exploration.
- Participate in campus activities and join student clubs & organizations to explore your interests and expand your skills.
- Log into *CareerSaint*, our campus career system: [www.siena.edu/careercenter/careersaint](http://www.siena.edu/careercenter/careersaint) Click on the '**Student Quick Guide**' to Career Saint.
- Check our monthly Career Center Calendar on our website & scan our weekly Career Center Updates. Attend a Lunch & Learn, a Career Planning Workshop and other Career Center programs.

Over Summer Break: Get a job, internship, or volunteer, to gain exposure to the world of work, develop interpersonal skills, help finance your education, and build responsible work habits.

### **Junior Year –Narrowing Down your Choices**

***Gain experience and get to know people in your prospective career field.***

- Have your resume critiqued by a Career Counselor.
- Secure an internship. Become a research assistant. Volunteer.
- Attend Speed Networking Night, Speed Interviewing Night, and the Spring Career, Internship & Graduate School Fair.
- Join professional organizations as a student member in your field of interest.
- Seek leadership opportunities in campus clubs, organizations or teams.
- Use class projects to practice career-related skills.
- Use *CareerSaint* to search for internships, part-time or summer jobs.
- Attend a Career Planning Workshop. (See Career Center Calendar)
- Check into graduate/professional school deadlines and requirements.
- Consider post-graduate service opportunities.
- Start to identify faculty/staff and employers to use as references.

Over Summer Break: Secure an internship or position related to your career goals. Use the experience to evaluate your career decision, network and practice career-related skills.

## Senior Year – Getting Ready for the Next Step

### *Carry out your job search or graduate/professional school plan.*

- Attend a Fall Senior Meeting to get a jump start on your plans.
- Meet with a Career Counselor in the Fall to discuss your post-graduate plans.
- Take graduate or professional school entrance exams early in the year (Summer or early Fall.)
- Update your resume and have it critiqued by a Career Counselor.
- Schedule a Mock Interview with an Employer-in-Residence to practice your skills before a real interview.
- Attend a Career Planning Workshop. See Career Center Calendar.
- Seek unadvertised jobs by networking with professionals in your field.
- Use *CareerSaint* to participate in on-campus recruiting and search for regional and national opportunities.
- Start a credentials file at the Career Center to store your letters of recommendation.
- Attend Speed Networking Night in the Fall to make contacts for your job search.
- Attend the Spring Career, Internship & Graduate School Fair in March to learn about local and regional job opportunities.
- Attend Speed Interviewing Night in the Spring to improve your skills and network.
- Join a Senior Job Search Group. Call the Career Center 783-2339 to sign up.
- Request letters of recommendation from faculty early in the Fall semester.

Summer: Entry level employees/job seekers: Transition to the workplace or continue to seek employment. Students admitted to graduate/professional school: Secure an internship, job or volunteer opportunity with an organization related to your advanced educational goals.

To get started in locating several job searching websites:

- Log on to [www.siena.edu/careercenter](http://www.siena.edu/careercenter)
- Click on the Career Opportunities tab on the left hand side of your screen.

### **What can the Career Center do WITH you?**

- Identifying your interests, skills and values
- Exploring careers and connecting them to your interests
- Choosing a major or a minor
- Finding an internship
- Using *CareerSaint*, *LinkedIn*® and Reference USA™
- Networking with alumni and professionals in your field(s) of interest
- Writing resumes and cover letters
- Preparing for interviews
- Strategizing your job search
- Choosing a graduate program
- Individualized career counseling

You do **not** have to know the answers to ‘what you will be’ when you leave Siena in order to meet with us. We are here to guide you as you figure it out. To schedule an appointment, call 783-2339 or stop by during our Drop-In Service times.

## **Financial Aid**

Desiring to place a college education within the reach of all deserving, qualified degree candidates, Siena College offers financial assistance in many forms. Financial aid to students is awarded primarily on the basis of need. The College gives consideration to scholastic ability in determining the amount of

scholarships and grants awarded from College funding. Specifically, the College offers the following types of campus based assistance to full-time matriculating students:

1. Franciscan Community and Siena College Scholarships Grants-in-Aid;
2. Funded Scholarships;
3. Federal/College Sponsored Supplemental Educational Opportunity Grants;
4. Federal/College Sponsored Perkins Loans;
5. Federal/College Sponsored Work-Study Program; and
6. State Sponsored Higher Education Opportunity Program.

To be considered for federal financial assistance (loans, grants, and/or college work-study), students must file the Free Application for Federal Student Aid (FAFSA), via the internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). The CSS PROFILE form is not required. The recommended date for filing financial aid forms for incoming freshmen is February 15; for transfers it is May 1. All new and continuing students must file by June 1. Please note that renewal of financial aid is dependent upon the filing again of the FAFSA each year. As major changes may occur from year to year, check with a Siena College financial aid officer to be sure the necessary forms have been filed.

### **Grants and Scholarships from Siena Funds**

Siena awards the following types of grants-in-aid and academic scholarships to full-time students requesting assistance. Students must submit the Free Application for Federal Student Aid (FAFSA) to be considered for any type of assistance, with the exception of Presidential Scholarships, Deans' Scholarship, Franciscan Scholarships, and Siena Humanities in Medicine Scholarships.

1. Presidential Scholarships are merit awards, renewable annually based on a minimum 3.1 cumulative average. These scholarships are offered to distinguished high school graduates based on their high school curriculum, high school average, results of standardized tests and letters of recommendation. These awards are extremely competitive. To enter the competition for a Presidential Scholarship, an admissions application must be filed no later than January 15 of the student's senior year in high school.
2. Siena offers other academic scholarships (Franciscan Scholarships and Siena Humanities in Medicine Scholarships) without regard for financial need, to incoming freshmen who have outstanding academic records. Renewal is based on maintaining a 3.1 grade point average. If you do not file the FAFSA, you must submit a written request to be considered for an honorary award.
3. Siena College awards grants to students with demonstrated need. In general, this type of award will be renewed annually, provided the student continues to demonstrate need, maintains satisfactory academic progress, and files the Renewal FAFSA by June 1.
4. Funded Scholarships: Unless otherwise noted, the following endowed scholarships are awarded by the financial aid committee as part of the financial aid packaging procedure. The scholarship criteria must be followed. In most cases, financial need, academic achievement and participation in extracurricular activities are considered in choosing award recipients.

### **The FAFSA must be filed in order for students to be considered for most of the following scholarships:**

The Dominick J. Agostino Memorial Scholarship, established by his wife, Pat and his children Mary Beth and Ryan to honor the memory of Dom Agostino '68, is awarded annually to an incoming freshman. Preference is given to a resident student who is able to live at Siena because of this award.

The George I. Alden Scholarship fund was endowed through a challenge grant by the George I. Alden Trust and through the generous response of Siena's alumni and friends. The scholarship is awarded annually to students who demonstrate financial need.

The Professor Roland A. Allen Memorial Scholarship has been established by Thomas P. Fehlner to honor the memory of an outstanding Siena Physics Professor who served as his first scientific mentor. The scholarship will be awarded based on academic merit and financial need to students who are interested in the physical sciences.

The Sara Allen and Julius/Jessica Bernard Scholarship endowed by an alumnus of the class of 1968 and is awarded based on financial need to students from Clinton, Essex, Washington, and Warren Counties in New York State.

The Alonge Family Scholarship is awarded annually to a student showing academic and career potential. The Scholarship was established by Guy Alonge, Jr. in honor of his family.

The Guy '54 and Dorothea Alonge, Jr. Scholarship established in 2008 by their son, Guy Alonge III to honor his parents' devotion to family, love for Siena and contributions to the career development of Siena students. The award is based on financial need and made to students from Columbia County, New York.

The AMSA Scholarship, established by Michael Bucci '73 and James Nealy, is awarded annually to an incoming freshman student who is the son or daughter of an employee of Armored Motor Service of America, Inc. Preference will be given to students in Armored Motor Service of America, Inc. operating areas, who demonstrate financial need, good academic standing and strong participation in extra-curricular activities. In the event that there is no student applicant from Armored Motor Service of America, Inc., the scholarship will be awarded to a student from New York State.

The Willard T. Anderson Scholarship was established in 2001 to honor the late Willard T. Anderson, owner and chairman of The Anderson Group. The scholarship is awarded annually to students who demonstrate financial need. Preference will be given to a student or students with a physical disability.

The Mary Burke Apps '53 Scholarship shall be awarded annually to entering or currently matriculated students in good academic standing who have demonstrated financial need with a preference to female students from Schenectady County.

The James Barba Family Scholarship was established in 1991 by James Barba, Sr. '56. This scholarship is awarded annually to students who demonstrate financial need and academic ability.

The Tim '79 and Anne (Hein) '80 Barker Scholarship was established in 2008 by Tim '79 and Anne '80 (Hein) Barker and their family. Preference will be given to a student whose family may have experienced unforeseen personal, financial or family circumstances that might have altered their ability to enroll their son/daughter at Siena. Financial need is a criterion.

The Charles P. Barrett Scholarship, established in 1999, by Charles P. Barrett '49 in honor of his 50th year class anniversary. The scholarship will be awarded annually to a student in good academic standing, based on academic achievement and financial need. Preference will be given to graduates of Catholic Central High School in Troy, NY.

The J. Patrick Barrett '59 and Thomas J. Murphy '67 Scholarship has been established to provide minority students who are in financial need the opportunity to receive a Siena College education.

The BBL Construction Services/Isabelle Led Duke Scholarship is awarded annually to sons and daughters of BBL employees. Second preference is given to sons and daughters of BBL Construction Services, its affiliated companies, its major sub contractors and vendors, and other business partners that are associated with BBL. Donald Led Duke, former Trustee, his family, friends and BBL Construction Services established this scholarship.

The Larry Benzie '58 Memorial Scholarship was established by his wife, Joan, and sons Larry III, Patrick, and George in 1999. Preference will be given to students whose residence is in Watervliet, New York. Financial need is a criterion.

The Keith Ronald Berry Memorial Scholarship was established by his family to honor Keith and perpetuate the memory of Keith's charisma, compassionate manner, adventurous nature and his ability to bring people together in a friendly environment.

The scholarship is awarded annually to a junior, preferably a business major and will be renewed for that student's senior year based on academic performance and financial need.

The Bethlehem Construction Corp., Wolanin Companies Ltd. & PrivateSky® Aviation Services, Inc. Scholarship, in memory of Vincent J. Wolanin, a Pennsylvania Law Enforcement Officer who died suddenly, was founded by his sons, Vincent M. Wolanin and Gregory M. Wolanin, and by Wolanin Companies, Ltd. and its affiliates. Awards

are made to a Siena student who exhibits financial need with preference given to a student who has lost a parent suddenly due to accident or sickness, and/or being an employee, family member of any Wolanin Companies, Ltd. affiliate and/or who demonstrates specific excellence in athletics or in mathematics, construction, aeronautics, music, computer science or physics.

The George D. Bigler Memorial Scholarship was established to provide scholarships to full or part-time business students with a first priority given to students residing in Ulster County.

Blass Communications Scholarship, established by the Blass family and corporation to mark the 20th anniversary of R.T. Blass, Inc., is awarded annually to entering or upperclass students on the basis of academic eligibility. Preference is given to sons and daughters of employees of Blass Communications. Outstanding students who are majoring in Marketing and Management or Finance or who are pursuing a career in the field of communications will be nominated by the Dean of the School of Business, and/or by the Admissions Committee.

The Bond Family Scholarship, established by Joseph F. '50 and Jane Bond, is awarded annually to entering students who demonstrate strong individual character, energy, academic promise and the ability to benefit from a Siena education. Preference is given to students who require this scholarship either to be able to attend Siena College or allow the student to enroll as an on-campus resident student. This award may be based on financial need or academic merit. Selection of these students is made by the Financial Aid Committee. The scholarship is renewable for students who maintain a cumulative grade point average of 2.6 or better with a proven history of achievement in activities fulfilling the Franciscan ideals of the College.

The Boyea Family Scholarship will be awarded annually to students having a demonstrated financial need and may be renewable.

The Mary Ryan Brennan Scholarship was established by James G. Brennan in loving memory of his wife, Mary Ryan Brennan '53. The scholarship will be awarded based on financial need to students from the Capital District Region.

The Brescio Scholarship is awarded to a student demonstrating financial need.

The James M. Brett Scholarship is awarded, based on academic merit and financial need, to a male student of Irish lineage who wishes to study law. The award may be renewed for four undergraduate years.

The Buehler Family Scholarship has been established by Paul J. Buehler '50 in memory of his wife, Ann Buehler. The scholarship will be awarded to students majoring in English who intend to pursue a career in teaching, or to students in the Sciences, to include without limitation, Biology, Chemistry, Physics or Computer Science. The scholarship will be awarded based on academic merit and financial need.

The Burke Family Scholarship is established to encourage and to assist a student with learning disabilities in order for the student to participate in the Siena experience. The award is based on need and may be renewable.

The Ed and Colleen W. Butler Scholarship was established to assist students from Ed Butler's home state of Vermont and Colleen's love for the Capital Region and Vermont. Preference is given to students enrolled in the School of Business.

The Din and Carol Cahill Scholarship was established by Carol Keenan/ Cahill '74 and Daniel "Din" Cahill '75. It honors their parents who enabled them both to enjoy a "Siena Experience." Preference is given to students from Catholic high schools. This Scholarship is need based and renewable.

The Callanan Industries Scholarship is awarded annually to entering or upperclass students in good academic standing who demonstrate financial need. The scholarship is renewable. Preference is given to employees and sons and daughters of employees of Callanan Industries.

The Janet (Burns) and Robert F. Campbell Scholarship '66 was established by Bob's friends and colleagues in 2005 to honor his retirement from First Albany Corporation. The scholarship will be awarded annually to sons and daughters of First Albany Corporation and all of its subsidiaries.

The Capital Region Scholarship Fund honors Siena's historic ties to the Capital Region and helps ensure that the College remains an attractive option to qualified and deserving local students.

The Honorable Thomas M. Carney '61 Memorial Scholarship has been established by Lana Carney in loving memory of her husband. The scholarship will be awarded to students who have demonstrated financial need with preference to students who are members of the men's or women's golf team. The scholarship is renewable annually.

The Caruso Family Scholarship established in 2007 will be awarded to a Schenectady High School graduate based on academic merit and financial need. Preference will be given to commuting students from Schenectady, NY who are interested in the field of Business.

The Salvatore D. Catalano '57 Family Scholarship was established in 2008 by Salvatore D. Catalano '57 to honor the Catalano Family's long connection to Siena College. The scholarship supports Capital District full-time students. The award is based on need and satisfactory academic standing.

The Class of 1959 Scholarship was created by members of the class in 2009 in celebration of the 50th Reunion of the Class of '59 and in appreciation of the great education received at Siena College. The scholarship will be awarded annually to a student based upon academic achievement and financial need, with consideration given to participation in community service and/or extra-curricular activities.

The Class of 1967 Scholarship created by the Class of 1967 is awarded annually to a student demonstrating financial need. The award is renewable.

The Class of 1980 Scholarship created by the Class of 1980 is awarded annually to a junior and will be renewed for that student's senior year. Financial need is a criterion.

The Class of 1981 Scholarship created by the Class of 1981 is awarded annually to a junior and will be renewed for that student's senior year. Financial need is a criterion.

The Class of 1982 Scholarship created by the Class of 1982 is awarded annually to a junior and will be renewed for that student's senior year. Financial need is a criterion.

The Class of 1983 Scholarship created by the Class of 1983 is awarded annually to a junior and will be renewed for that student's senior year. Financial need is a criterion.

The Peter A. Codina Scholarship was established in October of 2000, to honor the memory of Peter Codina. Preference will be given to hardworking applicants of Hispanic background and/or origin.

The Colonial Plumbing Scholarship is awarded annually based on academic merit and financial need. Preference is given to residents of the Capital Region interested in the field of business administration, and to sons, daughters and employees of the firm.

Company I 85, 10th Mountain Division Endowed Scholarship is awarded to family members of the 10th Mountain Division members. The scholarship is based on financial need.

The Matthew T. Conlin, O.F.M. Scholarship is awarded annually to an English major in the junior or senior class at Siena. It is given for academic ability, financial need and demonstrated contributions to the Franciscan ideals of the College. Nominations are submitted to the Financial Aid Director by the English Department. Eligible students must submit an essay describing their qualifications to the head of the English department.

The Msgr. Joseph P. Conway '41 Memorial Scholarship was established by Dr. and Mrs. Michael E. Fleming '52 and other friends to honor the memory of a saintly priest of the Albany Diocese and a member of Siena's first graduating class. Preference is given, but not limited, to applicants from the City of Troy and to those from the Village of Castleton. Financial need is a criterion.

The John J. Costello '85 Memorial Scholarship was established to honor the memory of John Costello '85. John had expressed his desire to someday endow a scholarship at Siena to help current students have the experience he was fortunate enough to have with the help of a scholarship and financial aid. The establishment of this scholarship by John's classmates, friends and family honors this desire, and allows his legacy to live on at Siena. The scholarship will be awarded to students with financial need.

The Brian M. Crouch Memorial Scholarship was established by Brian's classmates in the Class of 2002, the Crouch Family and their many friends to perpetuate Brian's memory—to remember his kindness, caring and

especially, his infectious smile. Recipients must be members of SADD (Students Against Destructive Decisions). First preference will be given to sons and daughters of public safety employees or volunteers (EMT's, firefighters, police officers, etc) and residents of the Capital Region. Awards are based on financial need.

The Thomas '69 and Patricia Cullen Scholarship was established by Thomas '69 and Pat Cullen. Preference will be given to students exhibiting financial need.

The Maureen O'Sullivan Cushing Scholarship, established by her husband James E. Cushing, is awarded annually to incoming freshmen students. Preference is given to students whose major field of study is in the liberal arts. Scholarships are based on financial need and academic eligibility and may be renewed.

The Robert and Trudy Cushing Scholarship was established by Robert and Trudy Cushing, both members of the class of 1977, in gratitude for the education that Siena provided. The scholarship is awarded annually to a student in good academic standing who has a demonstrated financial need.

The Mary Theresa Dana Memorial Scholarship was established by John and Carol Dana in loving memory of their sister, Mary. The scholarship is to be awarded to students who demonstrate financial need and are interested in pursuing a major in History or Political Science.

The Patrick Danahy '88 Memorial Scholarship was established by the Lawrence I. & Blanche H. Rhodes Memorial Fund in memory of Patrick, who lost his life in the attacks on the World Trade Center on September 11, 2001. Patrick was a devoted father who had a zest for life and enjoyed motorcycling and mountain biking. Preference will be given to a needy student who is majoring in Business.

The Joseph J. and Cecilia O'Neil Dawson Scholarship is awarded annually to an incoming freshman who is a graduate from the Binghamton, New York area. The student must demonstrate satisfactory academic performance and financial need. An award will be made to an incoming freshman every year. Scholarships will be renewed based on satisfactory academic performance and financial need.

The Donald and Mary DeBlieux Scholarship is provided annually to an incoming freshman from a Pittsfield, Massachusetts high school (Pittsfield High, Taconic or St. Joseph's), based on financial need. Established by their grateful daughter ('83) and son-in-law, in recognition of their generosity in providing Karen's Siena education. This scholarship is renewable based on academic achievement.

The Thomas E. '57, Patricia A., Thomas D., Paul E. '88, and Dana Ann '89 De Lorenzo Family Scholarship is established to enable others to have the same opportunity for the Siena experience that the members of the De Lorenzo family enjoyed. Awards are given based upon financial need. In addition, consideration may also be given to students in the Pre-Law program.

The Lucy Kazlauskas Del Grosso Memorial Scholarship has been established to honor Lucy by her husband David ('51). The scholarship will be awarded with preference to be given to students of Lithuanian background and/or origin. The award is to be based on financial need and academic merit. Consideration may also be given to students majoring in science.

The Dr. Louis J. and Alice Gazeley DeRusso Scholarship is awarded annually to members of the junior class from the Capital Region who intend to go to medical school. It may be renewed for the students' senior year. The scholarship recognizes the late Dr. DeRusso's (honorary alumnus-1966) deep humanitarian commitment to the medical profession and to the advancement of higher education. Nominations for the scholarship are made by the Health Professions Recommendation Committee. Awards are based on financial need and academic eligibility.

NYC Scholarship in Honor of Thomas Devane '50 endowment is used to provide scholarships for academically promising students from the five boroughs of the City of New York based on financial need.

The Gene Devine Scholarship was established by James '50, M.D. and Nancy Cassidy to honor the memory of their friend, Gene Devine. The award is based on financial need.

The Dewar Scholarship is awarded annually based on financial need and/or academic merit to graduates of Oneonta Senior High School, Oneonta, New York. Graduates of St. Mary's School, Walnut Street, Oneonta, New York, who subsequently graduate from high school in either Otsego or Delaware Counties, are also eligible.

The Louis J. DiNuzzo Memorial Scholarship was established by the DiNuzzo family in memory of Louis J. DiNuzzo '42. Preference will be given to students residing in the city of Watervliet, New York at time of admission. Students are not required to demonstrate financial need.

The Julianne English Scholarship was established in 2006 to mark the graduation of Julianne English '06. It was given in appreciation for the great educational and living experience she had as a Siena undergraduate. Her degree in the field of psychology has enabled her to pursue a career working with individuals with special needs. In recognition of her commitment in this field of work, the Julianne English Scholarship will be given to a student who has overcome some cognitive or physical obstacle to be accepted at Siena and who may not have otherwise been able to attend Siena if it were not for this award.

The Loretta '77 and William Epstein Endowed Scholarship was established by Loretta's family, many friends and colleagues at Siena College. The scholarship was established to honor Loretta whose work at Siena has embodied the Franciscan Tradition for more than 30 years. First preference will be given to a student majoring or minoring in the Creative Arts or working towards a certificate in theater; second preference will be given to a student majoring in Sociology or Social Work. This scholarship is based on financial need and is renewable.

The Faculty Memorial Scholarship is funded by donations from the Siena faculty, their families and friends. An award is presented each year in memory of a deceased Siena faculty member. The Scholarship is granted to a senior, based primarily on academic excellence. The recipient is selected by a faculty committee.

The Fr. John Felice, O.F.M. Scholarship honors Fr. John's long time commitment to serving the poor, especially the mentally ill in New York City, and his role in establishing the Franciscan Center for Service and Advocacy on the Center's 10th anniversary. It was Fr. John's vision, as the Provincial Minister of the Holy Name Province of Franciscan Friars, to challenge Siena College to create the center. Under his leadership, the Holy Name Province donated funds to begin the center. This scholarship is based on need and will recognize young women and men who answer the call through the Franciscan Center for Service and Advocacy to serve those less fortunate, thus continuing the Franciscan Tradition that has been an integral part of the Siena experience since the college's founding.

The Finneran Family Scholarship was established by John and Dena Finneran in recognition of John's parent's John P. & Mary E. Finneran, and his uncle, Msgr. Edward T. McCorry, who every day demonstrated to those around them what it meant to live life in the Franciscan Tradition. The children, grandchildren, nieces, and nephews of these wonderful people will be forever grateful for the love, support, and care they have given us throughout the years. Two generations of Finnerans have already or are currently attending Siena (John '81, Christopher '85, Rozanne '89, Brendan '11, and Katelyn '14) and the family would like to help assure that others may have the same opportunity. Preference will be given to an incoming lacrosse player or a student in good standing at any level whose family may have experienced unforeseen personal, financial, or family circumstances.

The Patricia Ann Fish '79 Scholarship is awarded annually on the basis of financial need. Preference is given to students of small public high schools with a graduating class of 100 or less. This Scholarship is renewable based on academic performance.

The Lewis Golub Memorial Scholarship was established in 2010 by Price Chopper's Golub Foundation. This award is dedicated to the memory of Mr. Golub, who, as the CEO of Price Chopper Supermarkets from 1983 to 2000, used his superior financial skills and business acumen to build the company into a premier regional supermarket chain. The award provides one scholarship annually to a finance major in his or her junior or senior year of college. The student must be in good academic standing and demonstrate financial need.

The Thomas Halpin Fitzgerald and Joan Zwiercan Fitzgerald Scholarship is awarded annually to a student from St. Joseph's High School in Pittsfield, Massachusetts. Financial need is not required but may be considered. The student must have maintained at least a B average and be recommended by St. Joseph High School Guidance Department.

The Noel A. Fitzpatrick, O.F.M. Scholarship is awarded to a student from Bishop Timon High School in Buffalo, N.Y. It is based on academic ability, financial need, and the espousal of Christian ideals similar to those held by the late Father Noel. The scholarship is renewable. Recommendation is made by officials at Bishop Timon High School.

The Ursula M. Forth Memorial Scholarship has been established by the Forth Family to honor her memory. Ursula appreciated the spiritual and academic influence that Siena and the Franciscan Tradition had on her family. The scholarship will be awarded based on academic merit and financial need to commuting students from the Capital Region who are interested in the field of science or the liberal arts.

George W. Foy Scholarship is awarded annually to incoming needy freshmen residents of Albany County, graduating from Albany County high schools.

The Franciscan Memorial Scholarship Fund has been initiated with a contribution from the Friars of Siena College on behalf of the Province of the Most Holy Name of Jesus, of the Order of Friars Minor. The fund honors the devotion and dedication of the Friars who have served Siena over the past 70+ years, from the founding of the College. The fund has been established in recognition of the longstanding tradition of Franciscan concern for those in society whose access to higher education has been restricted because of ethnic origin or social condition. Preference is given to individual students who have demonstrated concern for the well being of their communities. Recipients should be full-time students who exhibit financial need. The Director of Financial Aid will submit to the Guardian of the Siena Friary a list of all eligible candidates. Applicants will be recommended by the Guardian of the Siena Friary to the Financial Aid Committee. Final selection will be at the discretion of the Financial Aid Committee.

Franciscan Tradition Scholarships The spirit of volunteerism is alive and well at Siena, reflecting the College's Franciscan heritage. To recognize and strengthen that spirit, Franciscan Tradition Scholarships will be given to students who exemplify that spirit through service to Siena and the wider community.

The Clifford and Mary A. Frasier Scholarship was established by their son, Ernest '77, in 1999. It memorializes the love and devotion they gave to their family during their lifetime. The scholarship is awarded annually to a School of Business major who demonstrates high moral and ethical standards. The award is renewable based upon maintaining these standards. Financial need is a criterion.

The John T. and Mary Regina Garry Scholarship, established by John T. Garry II '50 and his wife, Mary Regina, is awarded annually to an upperclass student who has encountered unforeseen personal, financial or family circumstances which would preclude the continuation of studies at Siena. The scholarship is renewable contingent upon an annual review of the circumstances involved. The scholarship is need based.

The Genovese Elgidely Endowed Scholarship, established by John H. Genovese '76, Robert F. Elgidely '93, and Karen J. Bubniak '92, is awarded annually to students who are veterans, or currently serving members of the armed forces with demonstrated financial need and who may have transferred from a Community College.

The William H. and Grace Cronin Gibbs Memorial Scholarship was established by Mrs. Anne Gibbs Scripps in memory of her parents. The scholarship is awarded annually to a student in good academic standing who is a History major. Financial need is a criterion.

The John P. and Regina M. Glynn, Jr. Scholarship is awarded annually to an entering or current student with demonstrated financial need. Preference is given to a minority student with a strong academic record who has shown a consistent commitment to community service.

The Frank H. Gorke, Jr. Scholarship established by Frank H. Gorke, Jr. '67 will be awarded annually to a graduate of LaSalle Institute, Troy, New York. Students must demonstrate financial need and academic ability. The award is renewable.

The Catherine M. Grace Scholarship is awarded annually based on academic achievement and financial need. Preference is given to non-traditional female Siena students.

The Gundermann Family Scholarship is awarded to a student(s) from Nassau or Suffolk Counties, New York, based on need.

The Arkell Hall Foundation Scholarship is awarded annually to students who graduated from Canajoharie High School or a surrounding community in Montgomery County, New York. This award is renewable and is based on financial need.

The Father Martin A. Hanhauser, O.F.M. Scholarship established by family, friends, and former students, honors Fr. Martin's special contributions to the Siena Community. The scholarship is given annually based on need to students studying in the School of Science.

The William "Bill" Harlow, Jr. '91 Memorial Scholarship, was established by William (Dad), Eithne (Mom), Ann Marie (Sister), Denis (Brother), and Mary '06 (Sister) to eternalize the memory of Bill's spirit, amazing sense of humor, and his commitment to education, family, and community. The scholarship is awarded annually to a student who has declared a major in the School of Business and demonstrates financial need in continuing their higher education. As a family, we are so lucky to have shared life and love with Bill and we are forever thankful for those memories.

The Harmon/Coates Student Athletic Scholarship is awarded to students competing in intercollegiate athletics who achieve the highest grade point average for the individual academic year with preference to women's field hockey participants. Financial need is a criterion.

The Hollis E. and Elizabeth Hewlett Harrington Scholarship is awarded annually on the basis of academic and financial eligibility. Preference is given to students in the School of Business majoring in Finance, Marketing and Management, Accounting, Economics, or International Studies. Daughters or sons of employees of Fleet Bank (formerly Norstar Bank) of Upstate New York are given first consideration. This scholarship is renewable.

The Jeanne W. Harris Scholarship Award, sponsored by the New York State Federation of Home Bureaus, is offered annually to an upperclass needy student in good academic standing pursuing studies in the field of Family Counseling. The student selected for this award must be a resident of a county where the Federation of Home Bureaus, Inc. has an organized chapter. Nominations are submitted to the Financial Aid Director by the Social Work Department Head.

The Jack W. Harvey Memorial Scholarship honors the memory of loyal alumnus and College trustee Jack Harvey '50, a prominent Indianapolis businessman. Established by his wife Betsey and his daughters Kelly, Meg and Mandy, this renewable scholarship is awarded annually to students who demonstrate financial need, strong citizenship, active campus and community involvement, and academic achievement.

The William and Delia O'Donnell Harvey Memorial Scholarship, established by Jack W. Harvey '50 and his wife, Betsey, of Indianapolis, is awarded annually to students pursuing a career in business or science. Preference is given to those expressing a special interest in computer related fields. The awarding of the scholarship is based on financial need and academic eligibility and is open to entering freshmen as well as upperclass students. The scholarship may be renewed.

The Hayes Family Scholarship was established by Michael M. Hayes '67 in honor of his parents, Irene M. and Michael C. Hayes. Preference is given to students from Fairfield County, Connecticut and children of employees of the M.M. Hayes, Co., Inc. The scholarship is renewable contingent upon academic success and contributions to campus life. Financial need is a criterion.

The William Randolph Hearst Endowed Scholarship Fund was established in 1987 by the William Randolph Hearst Foundation. It provides need-based scholarships annually to freshmen and upperclassmen.

The Men and Ladies Ancient Order of Hibernians Capital Region Memorial Scholarship honors men and women who have contributed to Irish America life and culture, and Christian values. Its first and most important Hibernian honoree is Fr. Henry Tansey, M.H.M. In addition, the scholarship honors Trooper William Dooley, founder of the New York State Police Pipe Band. Each honoree promoted Christian values and community service. The scholarship is aimed at helping upper classmen and/or transfer students living in the capital district and based on financial need.

The Michael Hickey '83 Scholarship is created by Michael Hickey '83, a 1979 graduate of Tamarac High School. Preference is given to a business major but not solely awarded. The scholarship is awarded annually to a Tamarac High School (Brunswick/Troy, NY) graduate based on need and who demonstrates a strong teamwork and collaborative spirit.

The Higgins Scholarship is awarded to liberal arts majors at Siena College. Preference will be given to students who reside in the City of Yonkers or the County of Westchester, New York, and who demonstrate financial need. The Anna and Charles Hines Scholarship honors the parents of Fr. Hugh F. Hines, O.F.M., who was president of Siena College from 1976 to 1989. It was established by the Board of Trustees, in conjunction with former

trustees and the Board of Associate Trustees. This scholarship is awarded annually to students who demonstrate financial need, academic ability, and value the Franciscan ideal of service to others.

The Brian H. Holt Scholarship was established by his family, friends and classmates to perpetuate the memory of Brian's courage, faith and captivating personality. The fund was subsequently greatly enhanced by the New York City District Council of Carpenters. It will be awarded annually with preference given to a student who demonstrates financial need, is an active participant in school activities, and is a citizen of Dutchess County in the State of New York or to members of the New York City District Council and to their spouses, sons and daughters. The award may be renewed on a yearly basis, depending on satisfactory academic progress and contributions to campus life.

The Dr. Daniel J. Horgan Scholarship has been established by his family to recognize Dr. Horgan's 46 years of teaching and administrative services to Siena College as well as their own close ties to the Siena Community. It is awarded annually to a student demonstrating superior academic ability without regard to financial need. The award is given to a full-time upperclass student who is a Spanish major.

The Graham Hunter Scholarship is awarded annually in honor of Graham Hunter, a naturalized American citizen of Scottish descent. Preference is given to an accounting major. Renewal is dependent on academic achievement. The scholarship is need based.

The Father Mychal Judge, O.F.M. Scholarship has been established to honor the memory of Fr. Mychal Judge, O.F.M. who served as Assistant to the President at Siena College in the late 1970's and as chaplain to the New York Fire Department. The scholarship will be awarded based on need to children of firefighters who gave their lives trying to save others in the World Trade Center tragedy on September 11, 2001. If no students meet these criteria, awards may be made on the basis of need to students who are firefighters or children of firefighters.

The Howard M. Kahn Scholarship was established by the Kahn Family and Urbach Kahn & Werlin, PC (the firm which he co-founded) to perpetuate the memory of Howard M. Kahn (Siena Class of 1948). The scholarship recognizes Mr. Kahn's 40 years of association with Urbach Kahn & Werlin, PC, and his commitment to Siena College, the accounting profession, community organizations, and his family. This annual award will be made to accounting students who demonstrate financial need, good academic standing, and the attributes of Mr. Kahn. Additional preference will be given to graduates of Albany High School and/or to students who have lost a parent.

The Arlene Pole Kamilow Scholarship was established in 2006 by her daughter, Kim Kamilow/Luker '82, and her granddaughter, Katherine Luker '06, as a living legacy of love for her commitment and devotion to family and friends. This scholarship recognizes the Franciscan values she embodies and is awarded to a legacy upperclassman with an outstanding work ethic, who by their involvement in campus and community activities shows commitment to Siena's Spirit.

The Don J. Kauth '72 Memorial Scholarship was established by his fellow classmates, family and friends after his death on 9/11/01 at the World Trade Center. Don's Siena experience helped shape his future as a teacher, certified public accountant and financial analyst. He possessed intelligence, drive, compassion and a wonderful sense of humor as well as dedication to family. Preferences include students residing in New York State, those pursuing a career in Accounting or Finance and those expressing an interest in tutoring or teaching. The scholarship is based on financial need.

The Barth J. Kelly, III '62 Memorial Scholarship is awarded annually to an entering freshman. Preference is given to students from Monroe County, New York enrolled as full-time Siena students in the School of Business. Further consideration is extended to accounting majors and participants on a sports team represented by the Siena Athletic Department. The scholarship is based on financial need.

The Professor Thomas O. Kelly II and Dorothy S. Kelly Scholarship is intended to memorialize the role of faculty and the contributions of the wives of faculty members to the education of students. The scholarship will be awarded to a sophomore who is majoring in History and/or American Studies. Should none be qualified, then Philosophy, English, or Liberal Arts majors will be considered. It will be awarded on the basis of academic achievement, financial need and is intended to follow the recipient to graduation.

The Joseph F. and Catherine Ryan Kenney Scholarship was established to assist current or former parishioners of St. Joseph's Parish, of South Troy, NY or, if not available, an applicant may be a descendant of a parishioner or, lastly, a resident of South Troy and be in good academic standing at Siena College.

The Kenosian Family Scholarship is established by Martin '50 and Joyce McCollum Kenosian out of love for Siena and gratitude for life success. The award is given to graduates of Watervliet High School and Cambridge Central High School. The award is renewable, provided the recipient maintains a cumulative 3.0 grade point average.

The Helen and Theodore Kicinski Scholar Athlete Fund was established in 1989 by Walter Kicinski '62. The Scholarship was created in honor of his parents and to assist students who participate in varsity athletics at Siena College. Awards will be given to those student athletes recommended by a Siena Team Coach, endorsed by the Director of Athletics and approved by the Director of Financial Aid, with preference given to diverse student athletes expected to participate in select varsity sports at the College.

The Kiernan Scholarship is awarded to a student demonstrating financial need.

The John E. King Scholarship is awarded annually to entering or upperclass students majoring in Accounting. Scholarships recognize Mr. King's 35 years of association with the firm of Shaye, Lutz, Schwartz & King (which merged with Coopers & Lybrand) and his devotion to the College and his profession.

The KLC Scholarship has been established on the principle that a person's education is the most valuable asset one can possess. It also acknowledges the importance music plays in our society, especially during sporting events where the pep band's "magic" fires up the crowd. This scholarship is awarded to a student who comes from a family with multiple siblings, who is an active member of the Siena College Pep Band or was a member of their high school band with the intention of joining the Siena Pep Band. The student must demonstrate financial need.

The Kolakowski Family Scholarship, created by Edmund '51 and Gary '79, is intended to support an entering freshman considered to be an average student academically in his Siena class. Preference is given to student athletes. This award is based on financial need and is renewable.

The Charles Jeffrey Kovacs Memorial Scholarship was established by Mr. Kovacs at his Alma Mater, Siena, to affirm his long connection both educationally and spiritually having paved a lifelong vision and life style since he was enrolled in the 3<sup>rd</sup> Order of St. Francis in 1962. The scholarship will be awarded based on need to academically worthy science students.

The Professor Edward J. LaRow Scholarship, is awarded annually to a senior or junior student at Siena College who is interested in a career in the health professions and who has demonstrated significant academic achievement, the best qualities of the Franciscan tradition, and financial need. The scholarship, established by former students, recognizes Dr. LaRow's tireless dedication and service. Nominations for the scholarship are made by the Health Professions Recommendation Committee.

The Ronald and Suzanne LeBlanc Scholarship was established in 2004 by R. Andrew LeBlanc '94 and his wife, Melissa. The scholarship was created to honor his parents' commitment to education and to assist students who have demonstrated academic excellence and who have shown a caring commitment to the community through their activities. Preference will be given to graduates of Kingston and Saugerties High Schools.

The BBL Construction Services/Isabelle Led Duke Scholarship is awarded annually to sons and daughters of BBL employees. Second preference is given to sons and daughters of BBL Construction Services, its affiliated companies, its major sub contractors and vendors, and other business partners that are associated with BBL. Donald Led Duke, former Trustee, his family, friends and BBL Construction Services established this scholarship.

The Mary Doran Leslie Memorial Scholarship is awarded annually to students born in the United States of America who have graduated from a high school in a school district located entirely or partially within Schenectady County, NY, and shall be residents of Schenectady County at the time of their selection. Recipients will be selected by the Financial Aid Office based on academic ability, financial need, and demonstration of character.

The Louis Lombardi '43 and Gary L. Lombardi '68, Esq. Memorial Scholarship honors the memory of Louis Lombardi '43, former Siena professor and prominent Capital Region attorney and CPA and his son Gary L. Lombardi '68, Esq., a well respected attorney. During their lifetimes, both father and son were dedicated to the service of others. This scholarship exemplifies their deep care and concern for fellow humans. The scholarship is awarded annually to a student who anticipates going to law school. Preference is given to disadvantaged students who demonstrate financial need and strong academic achievement. The scholarship may be renewed if the recipient maintains an Academic Honor List average.

The Douglas MBA '66 and Cristine Lonnstrom Scholarship was established in 2006 by Douglas (MBA) '66 and Cristine Holm Lonnstrom. It recognizes a relationship spanning over 60 years that has included dedicated service, ambassadorship and philanthropy for the college. Preference will be given to a graduate of Voorheesville High School, Voorheesville, New York.

The Guy '89 and Diane Shea Maddalone '89 Scholarship was established by Board of Associate Trustee, Guy Maddalone, and his wife, Diane Shea Maddalone, to assist the College in providing the education of a lifetime for deserving young people. The award is given based on a student(s) exhibiting entrepreneurial interests (own their own business or actively involved in Siena's Entrepreneur Club or Center for Innovation and Entrepreneurship) and financial need.

The Charles and Leona MacClosky Scholarship is awarded annually to entering freshmen to develop Christian ideals, moral citizenship, and academic excellence. Awards are based on academic ability, citizenship, and financial need.

The Mack Family Scholarship is awarded to students who exemplify the Franciscan Tradition and who graduated from Our Lady of Lourdes High School, Poughkeepsie, New York, or from a high school in Dutchess County, New York, or a high school in the Mid-Hudson Valley, New York.

The Fr. Kevin Mackin, O.F.M. Scholarship, established by Alumni, friends, and admirers with a foundation gift from the members of the Class of 1981, recognizes Fr. Kevin's contributions as President of Siena College and his impact as a Franciscan Friar on the Siena community and beyond through his presence, personality and contagious spirit. The scholarship is awarded based on need.

The Guy '89 and Diane Shea Maddalone '89 Scholarship was established by Board of Associate Trustee, Guy Maddalone, and his wife, Diane Shea Maddalone, to assist the College in providing the education of a lifetime for deserving young people. The award is given based on a student(s) exhibiting entrepreneurial interests (own their own business or actively involved in Siena's Entrepreneur Club or Center for Innovation and Entrepreneurship) and financial need.

The Madden Family Scholarship was established by Christopher '77 and Carleen (Nelson) Madden and family to honor their parents/grandparents-Hon. Jerome (deceased) and Joan Madden and Frank and Eileen Nelson. This scholarship is awarded annually to students who demonstrate financial need and academic ability.

The Dr. Neva M. Mahoney Scholarship was established by the donor to provide students residing in the Capital Region of New York State an opportunity to attend Siena. A friend of the College, Dr. Mahoney received an Honorary Degree from Siena College in 1994. Financial need is a criterion.

The George T. Maloney '54 Scholarship is awarded annually to Siena College students majoring in the School of Science.

The Christopher Anthony Marchese Scholarship was established by his family and friends to perpetuate the memory of Chris' scholastic abilities, his love of God, family, and all who knew him, and his charming, easy-going manner which endeared him to all. It is awarded annually to a student majoring in accounting, with preference given to a student from Long Island who demonstrates financial need.

The Alberto '60 and Anabelle Mariaca Scholarship is awarded to Bolivian residents, or Bolivian citizens residing in the United States, who meet all standard qualifications for admission, as full-time, matriculated students, enrolled in four year degree programs.

The Kristian '96 and Kristen Mariaca Scholarship was established by Kristian '96 and Kristen Mariaca to create an educational opportunity to a female student majoring in Business with financial need. The scholarship is renewable based on satisfactory academic standing and continued enrollment in the Business major.

The Mashuta Family Scholarship, established in 2008, to celebrate Heather's 2008 graduation and Amber's acceptance into the Class of 2012 at Siena College. Preference will be given to students who are residents of the City of Schenectady, New York.

The Joseph P. Martin Memorial Scholarship was established by Alma and Vincent P. Martin '65 in memory of their son, Joseph, and is awarded to a junior or senior commuting student in the School of Science with a preference given to physics majors. This scholarship is based on financial need.

The Fr. Jerome J. Massimino, O.F.M. Scholarship was established by his many friends to honor Fr. Jerome's 25th Anniversary as a priest. While a member of the Siena community, he touched the lives of many students who valued his compassion and caring involvement in their lives. The scholarship is awarded annually to students who are active participants in student activities and who value the Franciscan charism of service to others. The scholarship is based on financial need.

The Robert F. Matt '62 Family Scholarship was established to honor the memory of Robert F. Matt, Siena class of 1962. Husband, father, grandfather, businessman, philanthropist, Robert (Bob) Matt passed away in February, 2009 after a brief, but intense battle with cancer. Bob's family and friends realized his dream of establishing a scholarship at his beloved alma mater. Bob attended Siena part-time for six years while simultaneously supporting a growing family with a full-time accounting job. Struggling through that critical point in his life shaped his strong character and built a foundation for philanthropy. Bob was generous to Siena and other nonprofit institutions over the years, and encouraged the establishment of a scholarship in his name to provide students with a resource unavailable to him so many years ago. In the same spirit in which Bob provided for others, his family and friends have made this a reality. The scholarship will be awarded to a student from Bob's hometown county of Schenectady, New York, with preference toward an accounting major, and based on financial need—all criteria that most accurately personifies Bob Matt.

The McCarthy Scholarship, established by the McCarthy Charities, Inc. in honor of its living and deceased members, is awarded annually to students from Rensselaer County who demonstrate high moral and ethical standards. Selection is based on financial need and academic achievement. The scholarship may be renewed.

The Father William E. McConville, O.F.M. Scholarship is awarded annually to an entering or current student with demonstrated financial need. Preference is given to a student with a strong academic record who has shown a consistent commitment to community service.

Edward T. McCormick Scholarship is awarded annually to incoming freshmen who are graduates of Catholic Central High School, La Salle Institute, or Troy High School of Troy, N.Y. Awards are based on need.

The Robert J. & Thomas R. McCormick Scholarship was endowed by Mr. Robert McCormick in honor of his sons. It recognizes his ties to Siena College and the Capital Region. The scholarship is awarded annually to a student in good academic standing who has a demonstrated financial need.

The M. Margaret McGoldrick Scholarship, established by her son, William P. McGoldrick '68, is awarded to students who participate in student communication activities and have financial need.

The Daniel '69 and Irene McKillop Scholarship was established on the occasion of the 40th Reunion of the Class of 1969. The scholarship will be awarded annually to a student on the basis of academic ability, financial need, and the student's demonstration of the Franciscan ideal of service to others. Consideration may also be given to students who are children of a NYC Police Officer.

The Robert J. Merritt Scholarship is awarded to students on the basis of academic merit and financial need and may be renewed for four years of undergraduate study. Preference is given to students who are graduates of Chaminade High School in Mineola, NY and to children of employees of one of the building trades (plumbing, carpentry, electrical, etc.).

The Dr. Pasquale and Marie Montesano Scholarship, in memory of Dr. Pasquale & Marie Montesano, established by their son, Pasquale X. Montesano, MD '75, is awarded annually to academically talented and financially needy students interested in majoring in the sciences. Preference is given to students from the Mohawk Valley of Upstate New York. The award is renewable.

The Father Donald J. Mooney, O.F.M., Scholarship is awarded annually to an incoming freshman who is a member of St. Edward the Confessor Church, Clifton Park, N.Y. The student must demonstrate satisfactory academic performance and financial need. The award is renewed on a yearly basis depending on academic achievement and conduct. Nominations are submitted to the Financial Aid Director by the St. Edward Parish Scholarship Committee.

The Michael, Helen and Aileen Moriarty Scholarship in honor of Fr. Michael Feeney, O.F.M. was established by Michael J. Moriarty '55 in honor of Fr. Michael Feeney, O.F.M., whose dedication and devotion to Siena College was exemplary. Awards from the scholarship will be based on financial need and preferences will be given to student athletes who participate in a non-revenue sport represented by the Siena Athletic Department, first preference being given to student athletes who participate in tennis or cross-country track. The Director of Financial Aid will consult with the Siena College Athletic Director to determine the recipient of the scholarship.

The Morrell Family Scholarship for Broadcast Journalism/Communications is awarded annually to students who exhibit James J. Morrell's '66 active involvement in community service endeavors and commitment to his fellow man. The scholarship was established by James and Kathleen Morrell in honor of their families. Awards will be given to students in the School of Business and School of Liberal Arts with an interest in pursuing a career in some aspect of Broadcast Journalism/Communications. Preference will also be given to students participating in the College Radio Station (WVCR) and Student Newspaper (Promethean). Awards are based on financial need and academic eligibility and may be renewed.

The Morrell Family Scholarship is awarded annually to an upper class student who exhibits James J. Morrell '66 active involvement in community service endeavors and commitment to his fellow man. The scholarship was established by James and Kathleen Morrell in honor of their families. Awards are based on financial need and academic eligibility and may be renewed.

The Moy Family Siena College/Albany Medical College Scholarship in honor of Dr. Edward J. LaRow '59 was established with a gift from Dr. and Mrs. Ronald L. Moy. Preference will be given to students who exhibit financial need, and who exemplify the mission of the Siena College/Albany Medical College Program. This scholarship may be renewed.

The Fr. John C. Murphy, O.F.M. Scholarship was established by Fr. John's many friends, alumni and colleagues at Siena College to honor his work at Siena that embodied the Franciscan traditions. This scholarship is based on financial need and may be renewable.

The John F. '79 and Kellyanne H. '81 Murray Scholarship, created in 2009 by Siena Trustee John F. Murray '79 and his wife, Kellyanne Healey Murray '81, has been established in appreciation for the gift of the Siena experience. The scholarship is based on financial need and preference is given to students from either Rensselaer or Schoharie Counties (New York) who have demonstrated a commitment to community service.

The Richard and Agnes Murray Scholarship is awarded annually to students on the basis of academic achievement and financial need. The scholarship was established in 1993 by Associate Trustee, Richard J. Murray, President, R.J. Murray Co., Inc., in cooperation with Carrier Air Conditioning Co., in recognition of 60 years of their association. The award may be renewed.

R.J. Murray and Family Scholarship was established in 1997 by Associate Trustee, Richard J. Murray. The scholarship will be awarded to a student in good standing based on academic achievement and financial need. The award is renewable.

The William P. Murray '48 Scholarship, established by his sister, Jane I. Murray, and his brother, Joseph E. Murray '47, is awarded annually to an incoming freshman. This scholarship is in memory of Bill '48, a renowned attorney, member of the bar of Washington, DC, New York and the US Supreme Court, decorated soldier, son of James and Hazel (Kilroy) Murray of Albany. Preference is given to Catholic students who are graduates of Christian Brothers Academy of the Capital Region. Awards are based on financial need and may be renewed.

The Nahow Family Scholarship was established by Dr. Theodore Nahow '43 and other family members. It is awarded annually on the basis of financial need and is renewable based on good academic standing.

The James L. Nash '64 Fellowship is awarded to a sophomore, junior, or senior student in good standing who has an interest in and commitment to providing community service for the betterment of individuals or organizations located in the Capital Region.

The James and Mary Nealy Scholarship is awarded based on demonstrated financial need.

New York City Endowed Scholarship Fund endowment is used to provide scholarships for academically promising students from the five boroughs of the City of New York based on financial need.

The NYC/ESM '82/'83 Scholarship was established to provide financial assistance to students from the five boroughs of New York City and those who graduated from East Syracuse-Minoa High School.

The Noteworthy Scholarship has been established in memory of Thomas B. Constantino whose business successes were always attributed to his faith in God. The scholarship will be awarded based on academic merit, preference will be given to students who are majoring in the field of Business and taking elective courses in the Creative Arts.

The Obermayer Family Scholarship was established by the Obermayer Family to honor the memory of Bernice A. Obermayer. Bernice was the wife of John W. '58 (Siena Board of Associate Trustees) and the loving mother of Steve '83 (Board of Associate Trustees), Paul W. (US Navy, Retired), James M. '90 (East Greenbush, NY Schools), and David R. '91. She was also the mother-in-law of Jeanne (Martin) Obermayer (Assistant Vice President, Student Affairs/Dean of Students.) Preference is given to, but not limited to, veterans of the Armed Services or their children. The scholarship is awarded annually based on academic achievement and financial need and may be renewed.

The George E. and Annabel G. O'Connor Memorial Scholarship, established by the O'Connor family, is awarded annually to students from the Capital Region. Preference is given to students from Waterford and Cohoes, headquarters of Mohawk Paper Mills, Inc., which Mr. George O'Connor served as President and Chairman. Scholarship renewal is based on financial need and academic achievement.

The Patrick "P.J." O'Donnell Scholarship was established by his family, friends, classmates, and parish to perpetuate the memory of his courage, quest for knowledge, faith, and endearing personality. It is awarded annually with preference given to a student who demonstrates financial need and is an active member of St. Edward the Confessor Church, Clifton Park, N.Y. The award may be renewed on a yearly basis depending on academic achievement and contributions made to campus life.

The Ollard Family Scholarship was established to provide scholarship assistance to students with demonstrated financial need.

The Terry Pacheco '80 Memorial Scholarship was established by James J. Treacy, Jr. '80 to honor his friend and classmate. First preference is given to students from Rockland County, New York. The scholarship is based on financial need.

The Salvatore, Josephine and Melissa Papa Scholarship will be awarded annually on the basis of financial need. The Scholarship is renewable based on good academic standing.

The Fr. Kenneth P. Paulli '82, O.F.M., Ed.D. Scholarship, in honor of his grandparents, Alfred and Lena Albano and Paul and Josephine Paulli, was established in 2010 by his many family, friends, Franciscan Brothers, colleagues, and fellow alumni to commemorate Fr. Ken's 25th Anniversary as a friar and 20th Anniversary as a priest. Fr. Ken has been a part of the Siena community for more than thirty years as a student, alumnus, faculty member, administrator, and as Chief of Staff to the President of Siena College. His student-centered and challenging teaching, his collaborative and thorough work as an administrator, his compassionate service to students, alumni, and countless others, locally and nationally, exemplify the continuing Franciscan and Catholic traditions and values of Siena College. On this, his double anniversary, we his family, friends, Franciscan Brothers, colleagues, and fellow alumni wish to celebrate Fr. Ken's commitment to a Franciscan and Catholic Liberal Arts Education by endowing a scholarship in his name to be awarded to students of financial need who value Catholic education.

The Perkinson Family Scholarship was established by Mr. Gary Perkinson, class of 1959, to provide scholarship assistance to deserving students who show financial need. First preference is given to students from Catholic Central High School in Troy, NY.

The Donald and Jay Petro Scholarship was established to assist students requiring financial aid and willing to supplement scholarship support from their own earnings.

The Dr. William L. Pfeiffer Scholarship, established and sponsored by the Albany Savings Bank, recognizes the deep personal commitment which Dr. Pfeiffer has exhibited toward higher education, the banking and business communities, and politics, as well as regional, state, and national affairs. Two scholarships are awarded to upperclass students with an interest in business, banking or political science. The scholarship is based on

financial need and academic eligibility. Preference is given to New York State residents and the scholarship may be renewed.

The Dr. William Pickett '41 Memorial Scholarship was established by family and friends to perpetuate Dr. Pickett's memory. Preferences will be given to students from Albany, Schenectady, and Rensselaer Counties who are interested or enrolled in a pre-med program. This scholarship is based on need.

The Bernard F. Picotte Scholarship is awarded annually to upperclass students majoring in Business or Computer Science. Recipients must be residents of the Capital District with preference given to residents of Albany or Schenectady County. The scholarship recognizes the Picotte family's active commitment to higher education in the Capital District. Nominations for the scholarship are made by the Dean of the School of Business.

The John D. Picotte Family Scholarship is awarded annually to a Siena student based on financial need. When possible the award should follow the same student during his or her four undergraduate years. Preference is given to a student from the Capital Region and/or the Adirondack Region of New York State.

The Margaret Sullivan Plante and the Marion Sullivan Bernier Scholarship has been established by Noreen Sullivan Galonian in loving memory of her sisters for: students who have encountered personal, financial or family circumstances which would preclude the continuation of studies at Siena; or students who have been accepted into the Siena/Albany Medical College Program; or students who are majoring in Chemistry.

The Lt. Col. Leo A. Polinsky '49 Memorial Scholarship, established by his cousin, Mrs. Theresa M. Walton, is awarded to an entering freshman and a junior student in good academic standing with demonstrated need. The scholarship is renewable. Preference is given to students from Montgomery County.

The Edward L. Pratt Memorial Scholarship has been established in memory of Edward L. Pratt, a Chemistry Major and member of the graduation class of 1956. Mr. Pratt's career in Chemistry led him to the position of Director of Analytical Chemistry for Sterling Drug, Inc. In appreciation for his valued education at Siena College, Mr. Pratt's wish was that the scholarship be awarded to a Chemistry major with a 3.1 GPA and who would not be able to attend Siena College without scholarship aid. The scholarship is to be awarded to a junior or senior at the discretion of the Chemistry Department faculty and college, however it may be given to a freshman or sophomore as long as above is recognized.

The Raila Family Scholarships, established by John B. '56 and Mary E. Raila, is awarded annually to upperclass liberal arts majors in good academic standing who make significant contributions to campus life and activity. Preference will be given to Capital District area students who demonstrate financial need.

The William R. Raub Memorial Scholarship Fund was established by his family, many friends and colleagues. The scholarship honors the memory of Will '85, a partner of Cantor Fitzgerald and Company, who died in the World Trade Center disaster on September 11, 2001. The scholarship is based on academic ability and financial need. Preference will be given to highly motivated Business students with a demonstrated record of academic success who either majors or plans to major in Finance.

The Richards Family Scholarship was established by Ruth F. and Edgar L. Richards, '66, G '68, to honor members of their family who are alumni of Siena College: James G. Richards '02; Edgar L. Richards, III, '91; Holly Sheeler Richards, '89; and Kevin C. Mancino '75. Financial need is a criterion.

The Andrew P. Ripp Scholarship was established by his family, classmates, and friends to perpetuate the memory of his courage, faith, and his most endearing personality. It is awarded annually to an upperclass student who has made significant contributions to campus life and activity, especially in the field of music. Preference is given to Capital Region students who demonstrate financial need.

1st Lt. James E. Roach Scholarship is awarded annually to a Siena student who reflects the College's ideals of academic achievement and citizenship. The scholarship was established by F. Thomas Roach and Patricia Roach Kellam in memory of their brother who was killed while faithfully serving his country in the U.S. Air Force. Financial need is a criterion.

The Gilbert O. Robert Memorial Scholarship was established in memory of Gilbert O. Robert. The scholarship will provide tuition assistance to a student majoring in business.

The John J. '42 and Ann D. Rose Memorial Scholarship was established from the estate of John and Ann Rose. The scholarship is awarded annually to a student with demonstrated financial need from Columbia County or Warren County, both in the State of New York, who is enrolled in a program leading to a career in Education or Business Administration.

The Ruth Katherine Rosemond Scholarship is awarded annually to a student reflecting the high personal ideals of Mrs. Rosemond, the wife of Bob "Gramps" Rosemond, a long-time friend of the College. Incoming freshmen are given first priority. The scholarship, which may be renewed for students making satisfactory academic progress, is based upon financial need.

The Thomas J. Ross Scholarship will be awarded to students majoring in Business from the Warren and/or Washington counties areas. The scholarship is based on financial need.

The St. Francis Fraternity Scholarship is awarded annually based on academic achievement and financial need. This scholarship is renewable.

The W.H. St. Thomas Family Siena College Scholarship was established in 1994 to honor the late William H. St. Thomas of Gloversville, the former owner and chairman of St. Thomas, Inc. of Gloversville. The scholarship is awarded annually to a full-time student from Fulton County, New York who is majoring in Business. Financial need is a criterion.

The Gene and Mary Sarazen Scholarship is awarded annually to students reflecting the high personal, athletic, and intellectual ideals of Dr. Sarazen. Consideration is given to candidates referred by individuals associated with the world of golf. Guidelines for academic eligibility are determined by the Admissions Committee; the initial awards are also based on need. Renewal depends on academic achievement and conduct.

The Joseph E. Scafidi Memorial Scholarship, established by his wife, Elizabeth Kelly Scafidi, is awarded to an entering (including a transfer student) or current student on the basis of financial need. Preference will be given to a student who is enrolled in either the School of Business or School of Science and who is a graduate of South Colonie Central High School, Colonie, NY. Awardees may also be graduates of one of the following high schools: LaSalle Institute, Troy, NY; Maple Hill, Castleton, NY; Bishop Maginn, Albany, NY, or Berne-Knox-Westerlo High School. The scholarship may be renewed for four undergraduate years.

The John M. Scarchilli '77 Memorial Scholarship was established by colleagues at Pioneer Bank to honor the memory of an exceptional man; a great leader, businessman, community citizen, musician and friend. John lived the Franciscan values that are at the heart of a Siena education. Awards are based on financial need to a student majoring in Accounting or Finance and having an interest in music.

The Fr. Erwin H. Schweigardt Scholarship was established through the generosity of Dr. Neva M. Mahoney to honor Fr. Schweigardt's service to the area. Preference is given to students residing in the Capital Region of New York State. Financial need is a criterion.

The Serbalik Family Scholarship was established in 2008 by Jim and Sandy Serbalik in honor of their parents, and out of respect for the value of a Franciscan and Catholic education and experience. The scholarship will be awarded to students based on academic merit and financial need, who are or will be competing in an individual sport sponsored by Siena and sanctioned by the NCAA.

The Rosemary J. Sgroi, rsm Scholarship in honor of her parents, Anna and Salvadore Sgroi, was established by her family, alumni, and friends to celebrate her fifty years as a Sister of Mercy and her fifteen years of service to the Siena Community. The scholarship is established for the benefit of a woman, preferably from the Arbor Hill Neighborhood in Albany, New York, who embraces the Franciscan spirit, and who would otherwise be unable to attend college. Preference will also be given to a woman who has been enrolled in the grade school and/or high school Mentoring Program at Siena.

The Toros Shamlian, Jr. Scholarship was established by Toros Shamlian, Jr. an alumnus of Siena and a retired partner from Coopers & Lybrand, LLP (PricewaterhouseCoopers LLP). Preference will be given to students who have an interest in the field of Business Administration and are from the Capital Region of New York. The scholarship is based on academic eligibility and financial need.

The Richard J. Sheehy Scholarship is awarded annually to a sophomore, junior, or senior in good academic standing. Preference is given to French, modern language or English majors, respectively, who, in the opinion of

the faculty, show promise in their major fields. Candidates are recommended by the faculty of the Modern Language Department. The award is renewable.

The Siena College Alumni Association Awards are granted to entering freshmen who are sons or daughters of Siena alumni. These awards are based on academic ability, citizenship, and financial need. The scholarships have been named to honor the following: Bishop Edmund F. Gibbons, former Coach Dan Cunha, Fr. Brian F. Duffy, O.F.M., Fr. Noel A. Fitzpatrick, O.F.M., Patrick J. Leonard, Stan Levine, William J. Shields, the Honorable Erastus Corning II, Fr. Matthew T. Conlin, O.F.M., Fr. Benjamin Kuhn, O.F.M., Edward LaRow, Ph.D., William J. Kirsch, Robert Nolte, and Sr. Rosemary Sgroi, R.S.M. These scholarships are renewed based upon satisfactory academic progress. Freshmen interested in applying for a Siena College Alumni Scholarship should indicate their intention when making application for admission to the College. Selection is made by the Admissions Committee.

The Siena College Excellence in Communications Scholarship is awarded annually to upperclass students. The scholarship is based on financial need and academic eligibility. Preference is given to students who demonstrate or express an interest in writing, communications, and/or journalism. The scholarship may be renewed. Interested students must submit to the head of the English department an essay describing their qualifications.

The Siena College Veteran and Cadet Fund was established by alumni and friends of Siena College along with the Professor of Military Science, Reserve Officer Training Corps to assist veterans of the United States Armed Forces and Cadets of the Mohawk Battalion, Reserve Officer Training Corps with reasonable expenses associated with attending Siena College. Lead donors to this fund include: Mr. John W. Atkinson '86 and Mr. James S. Scully '87.

The Siena Rugby Alumni Memorial Scholarship Fund was established in memory of Terence A. McShane '86 and Michael Taddonio '84 by friends, rugby teammates, and family of Terry and "Cool", who both died in the tragedies of September 11, 2001. Scholarships are given annually to upperclass rugby players who exemplify leadership within the Siena Community through their participation in student activities and community service. Financial need is a criterion.

The Margaret J. Smith Scholarship was established in 2005 by David '79, Alicia, Lauren and Madison Smith and friends. This scholarship was created to honor their mother/grandmother, a person who exemplifies all the values of St. Francis of Assisi. Beginning in 2010-11, preferences will be given to members of the Siena Women's Lacrosse Team.

The Social Work Scholarship/Program Endowment Fund was established by the Social Work Advisory Board with gifts from friends and supporters of the program. The purpose of the scholarship is to attract qualified student applicants to the Social Work program. Preference is given to students admitted to the program who maintain a 3.0 GPA, who have demonstrated commitment to the values of social work, and who have need. The Social Work Department/Program will make its selection from students pre-qualified by the Financial Aid Office.

The Spore Family Scholarship is a gift of Marie O. Spore in memory of her husband, Robert H. Spore '53. Her husband was an esteemed member of Siena College's staff as Assistant Vice President for Development and worked closely with the Board of Associate Trustees and the Annual Fund until his sudden death in 1984. Both of their children are Alumni of Siena College: Judie Spore/Robards '76 and R. David Spore '93. Awards are given to students in the School of Liberal Arts based on need.

The Mae Bonfils Stanton Trust Scholarship has been established to assist qualified students from Denver County, Denver, Colorado. Recipients will be designated as "Mae Bonfils Stanton Trust Scholars."

The Frances Weir Strachan Student Athlete Scholarship is awarded to students competing in intercollegiate athletics who achieve the highest grade point average for the individual academic year and are in need of financial support.

The Marjorie K. Sullivan Scholarship established by her husband, James A. Sullivan '41, is awarded annually to upperclass students in good academic standing who made significant contributions to campus life and activity. This scholarship is based on financial need and is renewable.

The Michael Taddonio/Class of 1984 Scholarship was established by Michael's family, many friends and the Class of 1984 on the occasion of its 25th Reunion in 2009. The scholarship honors the memory of Michael '84, who died tragically in the World Trade Center on September 11, 2001. Awarded annually, the qualifying student will be well-rounded, exhibiting Michael's passion of being involved in his school and community through participation in student government, athletics, or other extra-curricular activity. Financial need is a criterion.

The Anthony Tamburello Memorial Scholarship was established by family and friends to honor the memory of his commitment to education, his family and community. The scholarship will be awarded to students who demonstrate financial need, who show strong academic performance and demonstrate the values of Franciscan service to others.

The Teamsters Local No. 294 and Eastern Contractors Association Scholarship is awarded annually to members of the local union's construction division or to their spouses, sons, or daughters. First year and upperclass students attending either full-time or part-time may apply. There is a special application form, available through the union or the Financial Aid Office.

The Tesiero Family Scholarship honors the memory of John A. and Marcella C. Tesiero. The scholarship is awarded annually to a freshman and will be renewed based on academic performance and financial need. Preference is given to residents of the Capital Region and to sons and daughters of employees of Cranesville Block Company, Inc. and their subsidiaries.

The Dell N. Thompson, Ed.D., Scholarship honors Dell N. Thompson, Ed.D., who served as Vice President for Student Affairs, Vice President for Development and Director of Planned/Major Gifts during his career at the College. It was established by his many friends and colleagues, upon his retirement from Siena in 2002. This scholarship is awarded to students demonstrating financial need.

The Christie M. Tolosky Memorial Scholarship was established by her family, friends, and classmates to perpetuate the memory of Christie's spirit, her concern for fellow human beings and her love for all animals, but especially butterflies, dragonflies, horses, cats and dogs. This scholarship will be awarded annually to an upperclassman who has demonstrated care and compassion for humans and animals in the spirit of St. Francis as Christie had done during her lifetime. It will be awarded to students who have declared a major in Social Work, Sociology, or Psychology and have at least a 3.0 GPA. Preference will be given to a student who demonstrates financial need. The recommendation from someone who can attest to the character traits of the student, preferably a faculty member, is required.

The Fr. Kevin Tortorelli, O.F.M. Scholarship is established by Alumni, friends, and admirers to mark his 60th birthday. Fr. Kevin's friendship, compassion, and support touched all in so many ways. He cheered during rugby games, offered advice and counsel, married us, baptized our children, and consoled us in difficult times. His contribution as a Franciscan Friar to the Siena community and beyond is a great gift to all. The scholarship is awarded to students who participate broadly in activities while at Siena, contributing to the quality of life of the Siena community; who will make a particular effort to know the Franciscan Friars at Siena and to share with them a sense of vision, motivation and purpose; and who have financial need.

The George A. Ulrich '79 Memorial Scholarship was established by James J. Treacy, Jr. '80 to honor his friend. First preference is given to soccer players. Financial need is a criterion.

The Mary Pamela Underhill Scholarship will be awarded to a student to study abroad. Mary Pamela Underhill graduated from the University of Missouri with a degree in journalism and a minor in Spanish. She had a wonderful opportunity to study abroad in Spain for a year but declined as she needed her work-study job to help fund her education. It was a regret she spoke about numerous times and a dream that never came to fruition.

The Vassallo Family Siena College Scholarship will be awarded to a female of Italian American background who has attended a Catholic high school in Bergen County, New Jersey or surrounding counties. She shall be a hard working diligent student who has shown consistent improvements in her grades through the high school years. She should be involved in extra-curricular and/or community activities that testify to her character and commitment to others and be a full time student at Siena College.

The Lou Verruto Broadcast Scholarship, established by LIN TV Corp. in memory of our WIVB-TV General Manager, is awarded annually to an incoming freshman. Preference is given to a student who is pursuing a career in broadcasting and is based on academic achievement and financial need.

The Philip C. Vertucci Memorial Scholarship was funded in honor of a Siena College Alumnus who was a science teacher from Gloversville, New York. The Scholarship is to be awarded to a high school graduate from Fulton County, preferably Gloversville, New York, who is an upperclassman who has declared a major in Biology, Chemistry or Physics and/or a minor in Education. In the event that there are no students who meet the high school and major/minor requirements, then the scholarship will not be awarded in that year.

Vianney F. Vormwald, O.F.M., Memorial Scholarship, established by Christine and J. Patrick Barrett '59, recognizes Father Vianney's deep personal concern for the students he encountered during his 23 years of service as administrator and teacher at Siena. Scholarships are awarded to entering students who exhibit Father Vianney's high ideals. Scholarships are based on financial need and may be renewed.

The James M. Walsh Memorial Scholarship created by the Class of 1979 and the Walsh family is awarded annually to a junior and will be renewed for that student's senior year. Financial need is a criterion.

The John Francis Walsh, III Memorial Scholarship, established by his sister, is awarded annually to an incoming freshman. Preference is given to an economics major to provide the financial aid necessary to have a residential experience.

The Eleanor Mary Weisbrod Scholarship is established in 2007 by Ms. Eleanor M. Weisbrod at Siena College to honor Fr. Kevin Mackin, O.F.M., a loved and respected friend for more than fifteen years. The award will be based on financial need with preference given to a male student majoring in mathematics or participation in a pre-law program. The award is renewable and may follow a student(s) from freshmen through senior year in good academic standing.

The Ruth Shaffer Lynch Whalen Memorial Scholarship has been established by Mary Lynch Toomy and Elizabeth M. Lynch in loving memory of their mother for students involved in varsity athletic sports at Siena College or student athletes in the School of Business and based on need.

The Sister Karen Windelspecht Endowed Scholarship, established by her brother Bob, a 1970 graduate of Siena, to honor the memory of Sister Karen, is awarded to an incoming freshman that is a graduate of Academy of The Holy Names, Albany, NY. The recipient should have a dedication to academics with a record of academic achievement and a strong history of community service. The scholarship is based on financial need.

The Louis W. Witt, Jr. '51 Scholarship is awarded annually to a student(s) who has need and who is a member of the women's or men's golf team.

## **State and Federal Aid Programs**

Siena offers or coordinates the following types of State and Federal Financial Aid Programs:

### **New York State Programs**

Aid for Part-Time Study (APTS)

Child of Deceased Correction Officer Awards

Child of Veteran Awards

The Arthur O. Eve Higher Education Opportunity Program (HEOP)

Lottery Leaders of Tomorrow

Math and Science Teaching Incentive

Memorial Scholarships for Children and Spouses of Deceased

Police Officers and Firefighters

Merit Scholarships for Academic Excellence

State Aid to Native Americans

Tuition Assistance Program (TAP)

Regents Professional Opportunity Scholarships

Scholarship for Academic Excellence

Vietnam Veterans/Persian Gulf Veterans Tuition Awards

Federally Funded Scholarships Administered by New York State:

Robert C. Byrd Honors Scholarship Program

Paul Douglas Teacher Scholarships

*Note:* Rhode Island and Vermont also offer grants and scholarships to selected residents attending out-of-state institutions.

## **Federal Programs**

Federal Direct Loan Programs (DL):

    Federal Stafford Loans (Subsidized and Unsubsidized)

    Federal Parent Loans (PLUS)

Federal TEACH Grant Program

Federal Pell Grants

Federal Supplemental Educational Opportunity Grants (FSEOG)

Federal Perkins Loan Program

Federal College Work-Study Program (FCWS)

Reserve Officers Training Corps Scholarships (ROTC)

United States Bureau of Indian Affairs Aid to Native Americans

Veterans Administration (VA) Educational Benefits

All recipients of veterans educational benefits must have their attendance verified monthly by their professors. Day students should pick up and return their forms to the Registrar's Office. Evening students should pick up and return their forms to the Academic Advising Support Center. Failure to do so may jeopardize benefits. Further information regarding veterans benefits may be obtained by contacting the Registrar's Office.

Additional information regarding State and Federal Aid programs appears later in this Section.

## **Criteria for Renewal of Financial Aid**

Awards based on merit, without regard for need, such as the Presidential Scholarship, Franciscan Scholarship and Siena Humanities in Medicine Scholarship, are automatically renewed by the Financial Aid Office each year, provided the student earns a cumulative grade point average of at least 3.1. Athletic awards are renewed upon the recommendation of the Director of Athletics.

Siena Grants are awarded on the basis of demonstrated financial need as well as past academic performance or merit. Recipients of these grants may expect to receive renewal for four years, dependent upon filing the Free Application for Federal Student Aid (FAFSA) each year by our deadline and demonstrating financial circumstances similar to that upon which the original award was based. Any special circumstances should be submitted in writing to the Financial Aid Office.

To receive any Siena aid, a student must maintain full-time status (12 credit hours) each semester and achieve satisfactory academic progress as defined in this catalog. Courses that are being repeated may not be eligible in determining status for aid eligibility. Students considering repeating or dropping courses should speak with a financial aid officer prior to registering for the course. Less than full-time undergraduate students are eligible in some cases for Federal Direct Loans, Federal Pell Grants, and/or NYS APTS (Awards for Part-Time Students). Limited federal funding may also be available through the Federal Perkins Loan program as well as Federal SEOG and Federal College Work-Study programs. Graduate students may be eligible for Federal Direct Loans and/or Federal Plus Loans.

## **Satisfactory Academic Progress**

A student is in good academic standing if he or she is matriculated and is considered to be making progress toward a degree or certificate. The following cumulative grade indices shall be used as a basis for loss of good academic standing:

### **Undergraduate Students:**

Freshmen:                   below 1.50 after second semester

Sophomores:               below 1.60 after first semester  
                                  below 1.70 after second semester

Juniors:                   below 1.80 after first semester  
                                   below 1.90 after second semester

Seniors:                   below 1.95 after first semester  
                                   below 2.00 after second semester

**Graduate Students:**

Master of Science in Accounting:   below 3.0 after any semester

**Federal Aid**

In addition to complying with the above standards of good academic standing, full-time students who are recipients of any federal aid (e.g., Pell, SEOG, CWS, PERKINS, STAFFORD, PLUS), must also complete their educational objective within a period of six years (adjusted for differences in enrollment status; e.g. half-time). When determining whether or not a student is on pace to graduate within the appropriate timeframe, the Financial Aid Office will apply the following formula:

**Credits earned divided by credits attempted**

To be on pace, an undergraduate student must receive a satisfactory grade in at least 67% (2/3) of the courses they attempt. A graduate student must have a satisfactory grade in at least 75% (3/4) of the courses they attempt. In addition, undergraduate students must meet the standards of satisfactory progress outlined in the following chart:

Year	1		2		3		4		5		6	
Semester	1	2	3	4	5	6	7	8	9	10	11	12
Cumulative Index	1.3	1.5	1.6	1.7	1.8	1.9	1.95	2.0	2.0	2.0	2.0	2.0
Cumulative Credits Earned	15		30		45		70		95		120	

For undergraduate students, the Financial Aid Office will evaluate whether a student is making satisfactory academic progress one time per year, after grades are posted at the end of the spring semester. For graduate students, the Financial Aid Office will evaluate whether a student is making satisfactory academic progress at the end of the fall and spring semesters, after grades are posted. When calculating the cumulative grade point average and pace, the following conditions apply:

- Transfer credits are included in credits earned and credits attempted. Grades received for transfer credits are not included in the cumulative grade point average.
- Repeated courses count as credits attempted and the higher grade is used to calculate grade point average. There are restrictions to how often a course can be repeated.
- Incomplete grades must be made up within one month after the close of the term. If not, the grades are converted to an F.
- Pass/Fail courses where a grade of P (pass) is received are counted as credits attempted and earned. Pass/Fail courses are not included in the calculation of grade point average.
- Pass/Fail courses where a grade of Z (fail) is received are counted as credits attempted. Pass/Fail courses are not included in the calculation of grade point average.
- Grades of WP (withdrawal while passing) and WF (withdrawal while failing) are counted in credits attempted but are not included in the cumulative grade point average.
- Change of major has no bearing on the calculation of cumulative grade point average, credits earned, and credits attempted.

For additional information on withdrawals, incomplete grades, repeated courses, and pass/fail courses, refer to the appropriate section of the Catalog.

A student who does not meet the above criteria due to mitigating circumstances may still be considered to be making satisfactory progress. Appeals of loss of aid must be made in writing by the student to the Financial Aid Office. The Director of Financial Aid makes the final determination of whether the appeal will be granted.

A student who has appealed and has had his or her eligibility for aid reinstated is considered to be on financial aid probation. A student on financial aid probation may receive federal funds for one payment period. At that point, the student must meet the satisfactory academic progress standards or the requirement established during the student's appeal process in order to maintain Title IV eligibility.

*Under certain conditions*, a student who is not enrolled in a degree program (non-matriculated) may receive a Federal Direct loan for a period not to exceed 12 months.

### **New York State Aid**

Recipients of New York State assistance must be in good academic standing and have declared an academic major prior to the beginning of the junior year. Students who received their first State award in September, 1981, or after must display "satisfactory academic progress" and demonstrate "pursuit of program."

### **Standards of Program Pursuit for State Awards**

State regulations define "program pursuit" as receiving a passing or failing grade in a certain percentage of a full-time course load. The standards are as follows:

- In each semester of study in the first year for which an award is made, the student must receive a passing or failing grade in at least six credit hours (i.e., 50 percent of the minimum full-time load; namely, 12 hours).
- In each term of study in the second year for which an award is made, the student must receive a passing or failing grade in at least nine credit hours (i.e., 75 percent of the minimum full-time load).
- In each term of study in the third and each succeeding year for which an award is made, the student must receive a passing or failing grade in at least 12 credit hours (i.e., 100 percent of the minimum full-time load). Note that New York State has also imposed a minimum grade point average of at least 2.0 in order to be eligible for a fourth scholarship or TAP payment.

The State will accept as a passing or failing grade the grades "A" through "F" and any grade that indicated the student (1) attended the course for the entire semester and (2) completed all the assignments. The grade of "I" is acceptable only if it automatically changes to a standard passing or failing grade within a calendar month from the date of the final examination. The grades of "W" or "AU" do not constitute grades that may be used to meet the requirement of program pursuit.

### **Standards of Satisfactory Academic Progress for State Awards**

In addition to the above standards of "program pursuit," students generally must meet the standards of satisfactory academic progress outlined on the following chart. The progress of students with special circumstances, such as those who have transferred from another institution, have used their waiver (see below), or have received an award prior to September 1981, are monitored on an adjusted schedule.

For undergraduate students receiving their first award in 2007-2008 and thereafter, the following standards of progress must be met:

										HEOP Students
BEFORE BEING CERTIFIED FOR THIS PAYMENT OF STATE AID	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
A STUDENT MUST HAVE ACCRUED AT LEAST THIS MANY SEMESTER CREDIT HOURS	0	6	15	30	45	60	75	90	105	120
WITH AT LEAST THIS CUMULATIVE GRADE POINT AVERAGE	0	1.50	1.80	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Refer to past catalogs for the standards of progress that must be met for those students receiving their first award prior to 2007-2008.

Education law requires that no undergraduate student shall be eligible for more than four academic years (8 semesters) of State awards or five academic years if the program of study normally requires five years. Higher Education Opportunity Program students are also eligible for up to five years of State aid. A fifth year of undergraduate tuition assistance will reduce a student's eligibility for graduate support by one academic year.

#### **Waiver Procedures for State Aid**

The above standards of "satisfactory academic progress" for State student financial aid awards are absolute except when *waived* in accordance with State provisions. This waiver can be granted only once for the student's undergraduate study. The request for a waiver must be submitted by the student in writing to the Financial Aid Office. Catastrophic illness, a serious accident, personal or family problems, or other extenuating circumstances may be grounds for a waiver. A waiver may be granted at the discretion of the Director of Financial Aid.

#### **Transfer Student Eligibility**

Transfer students (and students readmitted after a period of absence from College) will be subject to procedures slightly different from those applied to students in continuing status. The Dean of the appropriate School will approve the acceptable number of transfer credits. The Director of Financial Aid is responsible for certifying financial aid and will determine the eligibility of the student for financial aid. For federal and institutional aid, at the end of each semester the student's progress will be reviewed in accordance with the college's standards as outlined above. Contact the Financial Aid Office for further information.

#### **Appealing the Withdrawal of Aid**

Recipients of federal, New York State and college grants, loans and work-study must conform to these standards of good academic standing. If an aid recipient is judged not to be in good standing, aid for the next and all subsequent semesters will be withdrawn until the student is again judged to be progressing satisfactorily.

An appeal of any decision regarding progress and aid eligibility must be made in writing by the student to the Financial Aid Office. Catastrophic illness, a serious accident, personal or family problems, or other serious extenuating circumstances may be grounds for an appeal. The appeal may be granted at the discretion of the Director of Financial Aid. The College must certify and maintain documentation of the

mitigating circumstances. This documentation will be in a form that does not violate confidentiality or compromise the rights of the student. It should be noted that a waiver is not an automatic right of a student. In the case of state aid, a waiver may be granted only once.

## **State and Federal Aid Programs**

Siena College offers or coordinates the following types of State and Federal Financial Aid Programs.

### **New York State Programs**

#### **Tuition Assistance Program (TAP)**

**Application Procedures:** Applicants must apply annually. The application deadline for the 2013-14 academic year is June 30, 2014; however, students are encouraged to file as early as possible. For academic year 2013-14, students will be required to file the Free Application for Federal Student Aid (FAFSA) to apply for TAP and payment of other State scholarships.

New York State (NYS) residents can apply for both federal and NYS financial aid using a single online session. After completing the Free Application for Federal Student aid (FAFSA) on the web, NYS residents can link to TAP on the web. The TAP application will be pre-filled with the information provided on the FAFSA.

Before submitting the applications, the applicant should review them with the high school counselor or college financial aid officer, especially if there are questions relating to completion of the application.

The Higher Education Services Corporation determines the applicant's eligibility and mails an award certificate directly to the applicant indicating the amount of the grant. A Change Form must be filed if you decide to attend a college other than the NYS college listed on your TAP application. Siena College may defer payment on the basis of receipt of the award certificate. Actual payment is received after the school certifies student eligibility.

**Selection of Recipients and Allocation of Awards:** Tuition Assistance Program (TAP) is an entitlement program. There is neither a qualifying examination nor a limited number of awards. The applicant must: (1) be a New York State resident and a U.S. citizen or permanent resident alien; (2) be enrolled full-time and matriculated in an approved New York State postsecondary institution or program; (3) not be in default on a Federal Loan or owe any refunds to federal programs; (4) be charged tuition in accordance with the minimum award, and (5) meet prior year income criteria, based upon NYS total taxable income (after exemptions and deductions). Note that income is subject to verification by the NYS Department of Taxation and Finance.

To be considered financially independent for State programs an applicant must be:

- (1) 35 years of age or older on June 30 preceding the academic year; or
- (2) 22 years of age or older on June 30 preceding the academic year; and not:
  - (a) resident for more than 6 consecutive weeks in the current, previous or subsequent calendar years, in any house, apartment or building owned or leased by parents,
  - (b) claimed as a dependent by parents on their federal or state income tax returns for the current or previous tax years,
  - (c) recipient of gifts, loans or other financial assistance in excess of \$750 from parents in the current, or previous, or subsequent calendar years, or
- (3) under 22 years of age on June 30, preceding the academic year and meeting all other requirements of (2) above, and in addition able to meet and document at least one of the following requirements:
  - (a) both parents deceased, totally or permanently disabled or incompetent,
  - (b) receiving public assistance other than Aid to Families of Dependent Children (AFDC), food stamps, or unemployment insurance, or
  - (c) ward of a court,

- (d) financially independent due to the involuntary dissolution of family, or
- (e) a recipient of TAP as a financially independent student in the previous academic year.

Undergraduate students married on or before December 31, 2013 (2013-2014 year) and all graduate students are exempt from the requirements of provision (3) above in determination of financial independence.

Undergraduate students generally receive TAP awards for four years of study. Students enrolled in approved five-year programs, or in a State-sponsored opportunity program, may receive undergraduate awards for five years. Graduate students may receive awards for up to four years. No student (including opportunity students) may receive awards for more than a total of eight years of undergraduate and graduate study.

The amount of the TAP award is scaled according to type of school, level of study, tuition charge, and net taxable income. The maximum annual award is reduced according to family income.

**Responsibilities of Recipients:** Recipients must be in good academic standing in accordance with Commissioner’s Regulations and must not be in default on a loan guaranteed by the Higher Education Services Corporation. A statement of good academic standing which is established by each institution in accordance with Commissioner’s Regulations is published in this catalogue. Under certain circumstances, defaulted borrowers can be reinstated for TAP eligibility by HESC.

Questions about NYS grants and loans may be directed to NYSHESC, 99 Washington Avenue, Albany, NY 12255 or by calling 1-888-NYSHESC. (888-697-4372).

**Child of Deceased Correction Officer Awards**

A NYS program for undergraduate students who lost a parent as a result of injuries sustained in the line of duty.

- Student must be a NYS resident attending a NYS college full-time.
- Supporting documentation will be required to establish eligibility.

How to apply:

- To apply, complete a special Child of Deceased Correction Officer supplement to the TAP application, which can be obtained from your guidance counselor, or from the New York State Higher Education Services Corporation (NYSHESC), 99 Washington Avenue, Albany, NY 12255, (888-697-4372).
- Application deadline for 2013-14 academic year is June 30,2014.
- The supplement is necessary to establish eligibility in the first year only.

**Regents Awards for Children of Deceased or Disabled Veterans  
(Child of Veteran Awards)**

Application Procedures: A special application, obtainable from the high school principal or counselor, must be filed with the New York State Higher Education Services Corporation (HESC), Albany, NY 12255. Documentary evidence to establish eligibility is required with the application.

Selection of Recipients and Allocation of Awards: The applicant must be the child of a veteran who died, or who has a current disability of 40 percent or more, or was classified as missing in action or was a prisoner of war. The veteran must currently be a New York State resident or have been a New York State resident at time of death.

**Periods of Service**

<b>Conflict or National Emergency</b>	<b>Period of Service</b>
Afghanistan .....	09/11/02 – end of hostilities
Persian Gulf .....	08/02/90 – end of hostilities
Vietnam/Indochina .....	12/22/61 – 05/07/75
Korean Conflict.....	06/27/50 – 01/31/55

World War II..... 12/07/41 – 12/31/46  
 World War I..... 04/06/17 – 11/11/18  
 or as a Merchant Seaman  
 during the period from  
 12/07/41 to 08/15/45

Students whose parent(s) was the recipient of the Armed Forces Expeditionary Medal, Navy Expeditionary Medal, or the Marine Corps Expeditionary Medal for participation in operations in Lebanon, Grenada, or Panama.

**Periods of Service**

<b>Conflict or National Emergency</b>	<b>Period of Service</b>
Panama.....	12/20/89 – 01/31/90
Grenada.....	10/23/83 – 11/21/83
Lebanon .....	06/01/83 – 12/01/87

Regents awards to children of deceased or disabled veterans are independent of family income or tuition charge, and are in addition to such other grants or awards to which the applicant may be entitled; however, total state award per year cannot exceed tuition.

**Award Schedule:** Awards may be received for up to five years, depending on the normal length of the program of full-time study in a college or a hospital nursing school in New York State.

SOURCE: New York State Higher Education Services Corp.  
 Albany, NY 12255

**Memorial Scholarships for Family of Deceased  
 Police Officers and Firefighters**

- A NYS program for undergraduate study that provides additional financial aid to students whose parent or spouse died as a result of injuries sustained in the line of duty.
- Award amounts based on tuition and non-tuition cost of attendance at the college and certain other state and federal grants. Award amounts will not exceed the average cost of attendance at NYS public institutions.
- Must be a NYS resident attending a NYS college full-time.
- Supporting documentation will be required to establish eligibility.

**How to apply:**

- To apply, complete a special Memorial Scholarship supplement to the TAP application, which can be obtained from your guidance counselor, or from the New York State Higher Education Services Corporation (NYSHESC), 99 Washington Avenue, Albany, NY 12255, (888-697-4372).
- Application deadline for 2013 – 14 academic year is June 30,2014.
- The supplement is necessary the first year only to establish eligibility.

**Aid for Part-Time Study (APTS)**

Aid for Part-Time Study (APTS) is for part-time undergraduate study. For the purposes of this program, part-time study is defined as being enrolled for 3 to 11 semester hours per semester. A college selects recipients from among eligible students and determines the amount of the award based upon a student's need and the amount of funding available at the institution. An award cannot exceed tuition charges.

**Application Procedures:** A special APTS application is required for a student to be considered for an award. The student must also provide the Financial Aid Office with copies of the appropriate New York State tax return. Siena also requires that you file a Free Application for Federal Student Aid (FAFSA). Forms are available in the Financial Aid Office or on the [siena.edu/financialaid](http://siena.edu/financialaid) website.

**Selection of Recipients:** The applicant must be (1) a New York State resident, (2) be working toward an undergraduate degree as a part-time student, (3) be in good academic standing, (4) be either a United States citizen, permanent resident alien or refugee, (5) have not used up Tuition Assistance Program (TAP) or other New York State student financial aid eligibility for full-time study.

**Income Limits:** Income limits based on New York State's taxable income apply.

For more information contact:      Student Information  
   NYSHESC  
   Albany, NY 12255  
   1-888-NYSHESC

### **State Aid to Native Americans**

**Application Procedures:** Application forms may be obtained from the Native American Education Unit, New York State Education Department, Albany, NY 12230. The completed application form should be forwarded by the applicant to the Native American Education Unit along with the following materials:

(1) official transcript of high school record or photostat of General Equivalency Diploma; (2) personal letter, setting forth clearly and in detail educational plans and desires; (3) signatures of the parents of minor applicants, approving education plans; (4) official tribal certification form; and (5) copy of acceptance letter from college attending.

**Selection of Recipients and Allocation of Awards:** The applicant must be: (1) a member of one of the Native American tribes within New York State and a resident of New York State; (2) have graduated from an approved high school, or have earned the General Equivalency Diploma, or be enrolled in a program in an approved postsecondary institution leading to degree-credit status and the General Equivalency Diploma; and (3) enrolled in an approved postsecondary institution in New York State.

State Aid to Native Americans is an entitlement program. There is neither a qualifying examination nor a limited number of awards.

**Award Schedule:** The award is for a maximum of four years of full-time study (five years, where a fifth year is required for completion of degree requirements), a minimum of 12 credit hours per semester. Students registered for less than this number will be funded per credit hour. Remedial programs are not fundable.

**Responsibilities of Recipients:** Students are responsible for notifying the Native American Education Unit in writing of any change in student status or program or institutional enrollment. Students must also submit semester grades at the end of each semester, showing satisfactory progress toward completion of degree or certification requirements.

SOURCE:      Native American Education Unit  
   New York State Education Department  
   Room 475 EBA  
   Albany, NY 12234  
   (518) 474-0537

### **Vietnam Veterans Tuition Awards**

This program is to assist Vietnam Veterans enrolled in degree programs on either a full- or part-time basis.

#### **Eligibility Requirements:**

- Residency in New York State on the effective date of the law (April 20, 1984) or at the time of entry into service and resumption of residency by September 1, 1988.
- Service in the U.S. Armed Forces in Indochina between January 1, 1963 and May 7, 1975.
- Discharge under other than dishonorable conditions.
- Must apply for a TAP award and a Pell Grant if the student will enroll full time for any term.
- Must apply for a Pell Grant if the student will be enrolled only for part-time study.

#### **Duration:**

- Full-time Study - Awards are available for up to 8 semesters for a 4-year program, or 10 semesters if a degree program is specifically approved as requiring 5 years. Recipients enrolled in an approved program of remedial study are considered to be enrolled in a program normally requiring 5 years.

- Part-time Study - Awards are available for eligible students taking 3 to 11 credit hours per semester, or the equivalent, in an approved undergraduate degree program. Awards are available for 16 semesters (8 years), or 20 semesters (10 years) for programs specifically approved as requiring 5 years of full-time study. Recipients enrolled in an approved program of remedial study are considered to be enrolled in a program normally requiring 5 years.

**Application Procedures:**

- If you have already established your eligibility (and have been assigned a VVTA eligibility number by HESC) do one of the following:
  - (a) If you plan to attend college for one or more terms on a **full-time** basis, complete the Free Application for Federal Student Aid (FAFSA) and the NYS TAP supplement available from NYSHESC or the Financial Aid Office.
  - (b) If you plan to attend college only on a **part-time** basis send a letter to NYSHESC, VVTA Program, 99 Washington Ave., Albany, NY 12255 outlining your educational plans by giving the college code, college name and the terms you will be attending as a part-time student.
- If you have **not yet established** your eligibility for a Vietnam Veteran Tuition Award call (518) 474-5642 or 1-800-NYSHESC or write to NYSHESC, VVTA Program, 99 Washington Ave., Albany, NY 12255 and request a Vietnam Veterans Tuition Award Supplement.

**The Arthur O. Eve  
Higher Education Opportunity Program (HEOP)**

**Application Procedures:** Application is through the independent institution of higher education to which the applicant is applying.

**Selection of Recipients and Allocation of Awards:** The applicant must be: (1) a New York State resident; (2) academically and economically disadvantaged according to guidelines approved by the Board of Regents and the Director of the Budget. Transfer applicants must be a matriculated undergraduate student in an opportunity program at a college or university in New York State. Selection of eligible applicants for participation in HEOP is conducted by the College and the HEOP program.

**Award Schedule:** The amount of financial assistance and other support provided to HEOP participants is dependent on need as determined by the institution and the program, within the State guidelines.

SOURCE: Bureau of Higher Education Opportunity Programs  
New York State Education Department  
Albany, NY 12230

**Vocational and Educational Services for Individuals with Disabilities (VESID)**

**Application Procedures:** For information concerning this program, contact Vocational and Educational Services for Individuals with Disabilities (VESID), 6 Tower Place, Executive Park, Albany, NY 12203, (518) 473-8097.

**Selection of Recipients and Allocation of Awards:** Any disabled person, with a substantial employment handicap, who can become employable within a reasonable period of time may be eligible. VESID serves those having any physical, emotional, or mental disability except blindness.

The legally blind are served by the Commission for the Blind and Visually Handicapped, State Department of Social Services, 40 North Pearl Street, Albany, NY 12243.

Eligible applicants may receive counseling, medical examinations, and other evaluation services, physical restoration services, and instruction and training including that given at institutions of post-secondary education.

Clients are asked to share the expense, based upon State standards, of some of the services provided, such as college or university expenses, to enable the client to obtain his/her vocational objective.

### **Regents Professional Opportunity Scholarships**

New York State annually offers Regents Professional Opportunity Scholarships, based on need, to undergraduates and graduate students pursuing careers in certain approved programs of study. In previous years, eligible programs of study have included accounting, architecture, chiropractic, dental hygiene, engineering, landscape architecture, law, nursing, occupational therapy, optometry, pharmacy, physical therapy, physician's assistant, podiatry, psychology, social work, speech language pathology/audiology and veterinary medicine. Recipients must attend an approved program in New York State on a full-time basis, be a state resident and citizen or qualifying non-citizen of the United States. Those who are economically disadvantaged and who are members of a minority group that is historically underrepresented in the chosen profession are given priority. HEOP students are also given special consideration.

Special applications are available from the NYS Education Department, Bureau of HEOP/VATEA/Scholarships, EBA, Room 1071, Albany, NY 12234. Phone: (518) 486-1319. You must file the Free Application for Federal Student Aid (FAFSA) and the special state supplement to receive payment of these scholarships each year.

### **Robert C. Byrd Honors Scholarship Program**

Awarded each year for up to four years to high school seniors from each county in NYS. Eligibility is determined by a combination of high school grades and GED Scores or by SAT or ACT test scores and GED scores.

Applications are available in the fall from the guidance office. You must take the SAT or ACT test before the application deadline. For further information, contact: NYS Education Department, Room 1078 EBA, Albany, NY 12234 (518-486-1319).

## **Federal Programs**

### **Federal Direct Student Loan Program for Undergraduates (Federal Direct loans, Federal Direct Parent PLUS)**

**Special Note:** The effective date of the information below is April 2011. Check the Siena College Financial Aid Office website for updated information about the Federal Direct Student Loan Program.

#### **Federal Direct *Subsidized* Loans:**

- Eligibility for the federal interest subsidy on these loans is *based on financial need* as calculated from information you provide on the Free Application for Federal Student Aid (FAFSA). There is no income cutoff as long as need is demonstrated.
- The interest rate for the 2013-14 academic year for the Direct Federal Subsidized Stafford loan is 6.8%.
- The Federal Direct Subsidized Stafford loan has a 1.051% origination fee which will be deducted from the gross amount of the loan funds sent to Siena. Repayment begins six months after the student is no longer enrolled at least half time or graduated. Interest does not accrue until 6 months after the student has graduated or ceases to be enrolled at least half time.

#### **Federal Direct *Unsubsidized* Loans:**

- Eligibility for these loans is *not based on financial need*; to be eligible the Free Application for Federal Student Aid (FAFSA) must be filed.
- Payment of interest begins when the loan check is disbursed, but deferment of interest is available. Payment on principal begins six months after the student is no longer enrolled at least half time. There is no penalty for early repayment. Students that would like to make payments on their loans while enrolled at Siena need to contact their servicer directly. Information about your servicer and contact information can be found by visiting [www.nsls.ed.gov](http://www.nsls.ed.gov).
- The interest rate for Federal Direct Unsubsidized loans for the 2013-14 academic year is 6.8%.
- The Federal Direct Unsubsidized Stafford loan has a 1.0051 % origination fee which will be deducted from the gross amount of the loan funds sent to Siena.

**Application Procedures:**

- Students must file an annual Free Application for Financial Aid (FAFSA) in order to be eligible for a Federal Direct loan. They will be notified of their eligibility for Federal Direct Subsidized and/or Federal Direct Unsubsidized loans on their Award Letter from the College. If a loan is NOT declined on the award letter, the College Financial Aid Office will electronically submit the necessary information to the Federal Direct Loan Program for origination.
- All first time Direct Federal loan borrowers must complete a Master Promissory Note (MPN) and Entrance Counseling before their loan is certified by the Financial Aid Office.
- Once the student has completed their MPN and Entrance Counseling and the loan is submitted to the Federal Direct Loan Program, the funds will be electronically submitted to the college. Authorized loan funds are applied to student accounts upon receipt by the college. Federal requirements state that all federal loans are sent to Siena College in two equal disbursements during the enrollment period.
- For more information about the application process, please visit the Siena College Financial Aid Website.

**Selection of Recipients and Allocation of Awards:**

To be eligible for a Federal Direct Loan a student must:

- (1) Be a U.S. citizen or permanent resident alien; and
- (2) Be enrolled in or admitted as at least a half-time student at an approved college, university or other postsecondary institution in any of the United States or in a foreign country, and
- (3) Not be in default on any federal loan or owe a refund on a federal financial aid program.

**Repayment:**

Once in repayment, many deferments are available depending on your status at the time of loan repayment and the type of loan. For information about your options, contact your loan servicer. Information about your servicer and contact information can be found by visiting [www.nslds.ed.gov](http://www.nslds.ed.gov).

**Deferment (After Repayment Begins):**

Once you go into repayment, deferments are not automatic. You should contact your servicer as soon as possible when you seek deferment or forbearance (payment of interest only) on your loan. Repayment of all or part of a loan may be made in advance without penalty.

**Loan Servicer Information:**

For information about your loan servicer, visit [www.nslds.ed.gov](http://www.nslds.ed.gov). Once at the site you will have access to detailed information about your federal loans, including the loan period, amount and servicer.

**Federal Direct Parent Loans for Undergraduate Students:**

- A federal program for parents of dependent undergraduate students. Parents may borrow up to the cost of attendance, less other financial aid, each year for each student.
- Eligibility is **not** based on need.
- Parents must consent to a credit check as part of the Federal Direct PLUS loan application process. Students whose parents are denied for a Federal Direct PLUS loan will be eligible for additional Federal Direct Unsubsidized loan funds.
- Federal Direct PLUS loans can be used to meet all or part of the calculated Family Contribution (EFC)
- For the 2013-14 academic year, the interest rate is fixed at 7.9%.
- Interest begins on the day the loan is disbursed. Payment on the interest and principal usually begins 60 days after disbursement. Parents may have up to 10 years to repay.
- If the borrower meets certain requirements, deferments may be available. Contact your servicer for additional information.
- The Federal Direct PLUS Loan has a 4.204% which will be deducted from the gross amount of the loan borrowed.

**Application Procedures:**

- Students must submit their Free Application for Federal Student Aid (FAFSA)
- Students and families can determine their maximum PLUS loan eligibility from their Award Letter

- The parent borrower will need to complete an application for the Federal Direct Loan Program. For more information about the PLUS Loan Application Process, please visit the Siena College Financial Aid website.

### **Federal Direct Student Loan Program for Graduate Students (Federal Direct loans, Federal Direct Graduate PLUS)**

**Special Note:** The effective date of the information below is April 2011. Check the Siena College Financial Aid Office website for the update information about the Federal Direct Student Loan Program.

#### **Federal Direct Unsubsidized Loans:**

- Eligibility for these loans is *not based on financial need*; to be eligible the Free Application for Federal Student Aid (the FAFSA) must be filed.
- Payment of interest begins when the loan check is disbursed, but deferment of interest is available. Payment on principal begins six months after the student is no longer enrolled at least half time. There is no penalty for early repayment. Students that would like to make payments on their loans while enrolled at Siena need to contact their servicer directly. Information about your servicer and contact information can be found by visiting [www.nslds.ed.gov](http://www.nslds.ed.gov).
- The interest rate Federal Direct Unsubsidized Stafford loan for the 2012-13 academic year is 6.8%. As of the printing of this catalog, interest rates for 2013-14 have not yet been set. Please contact the Financial Aid Office to determine the 2013-14 Federal Direct loan interest rate.
- The Federal Direct Unsubsidized loan has a 1.051% origination which will be deducted from the gross amount of the loan funds sent to Siena.

#### **Application Procedures:**

- Students must file an annual Free Application for Financial Aid (the FAFSA) in order to be eligible for a Federal Direct Stafford loan. They will be notified of their eligibility for Federal Direct Stafford Subsidized and/or Unsubsidized loans on their award letter from the college. If a loan is NOT declined on the award letter, the Financial Aid Office will electronically submit the necessary information to the Federal Direct Loan Program for origination.
- All first time Federal Direct Stafford loan borrowers must complete a Master Promissory Note (MPN) and Entrance Counseling.
- Once the student has completed their MPN and Entrance Counseling and the loan is submitted to the Federal Direct Loan Program, the funds then will be electronically submitted to the college. Authorized loan funds are applied to student accounts upon receipt by the college. Federal requirements state that all federal loans are disbursed in two equal disbursements during the enrollment period.
- For more information about the application process, please visit the Siena College Financial Aid Website.

#### **Selection of Recipients and Allocation of Awards:**

To be eligible for a Federal Stafford Loan a student must:

- (1) Be a U.S. citizen or permanent resident alien; and
- (2) Be enrolled in or admitted as at least a half-time student at an approved college, university or other postsecondary institution in any of the United States or in a foreign country, and
- (3) Not be in default on any federal loan or owe a refund on a federal financial aid program.

#### **Repayment:**

Once in repayment, many deferments are available depending on your status at the time of loan repayment and the type of loan. For information about your options, contact your loan servicer. Information about your servicer and contact information can be found by visiting [www.nslds.ed.gov](http://www.nslds.ed.gov).

#### **Deferment (After Repayment Begins):**

Once you go into repayment, deferments are *not* automatic. You should contact your servicer as soon as possible when you seek deferment or forbearance (payment of interest only) on your loan. Repayment of all or part of a loan may be made in advance without penalty.

**Loan Servicer Information:**

For information about your loan servicer, visit [www.nslds.ed.gov](http://www.nslds.ed.gov). Once at the site you will have access to detailed information about your Federal Loans, including the loan period, amount and servicer.

**Federal Direct Graduate PLUS Loan for Graduate Students:**

- A federal program for graduate students. Graduate students may borrow up to the cost of attendance, less other financial aid, each year for each student.
- Eligibility is **not** based on need.
- Students must consent to a credit check as part of the Federal Direct Graduate PLUS loan application process. For students that do not pass the credit check, they may reapply with an endorser.
- Students must utilize Stafford loan funds before applying for Federal Direct Graduate PLUS loan funds.
- For the 2011-12 academic year, the interest rate is fixed at 7.9%. As of the printing of this catalog, interest rates for 2012-13 have not yet been set. Please contact the Financial Aid Office to determine the 2012-13 Federal Direct loan interest rate.
- Interest begins on the day the loan is disbursed. Payment on the interest and principal usually begins 60 days after disbursement. Graduate students may have up to 10 years to repay.
- If the borrower meets certain requirements, deferments may be available. Contact your servicer for additional information.
- The Federal Direct Graduate PLUS loan has a 4.204 origination fee which will be deducted from the gross amount of the loan borrowed.

**Application Procedures:**

- Students must submit their Free Application for Federal Student Aid (FAFSA).
- Students can determine their maximum Federal Direct Graduate PLUS loan eligibility from their award letter.
- The student borrower will need to complete an online application with the Federal Direct Loan Program. For more information about the Federal Direct Graduate PLUS loan application process, please visit the Siena College Financial Aid website.

**Federal Pell Grant Program**

**Application Procedures:** Students must apply for Pell by filing the Free Application for Federal Student Aid (FAFSA).

The completed application should be submitted for processing according to the directions included on it. A Federal Student Aid Report will then be sent to the applicant. The amount of the applicant's award is determined by the financial aid officer at the post-secondary institution attended. Upon enrollment, funds are credited to the student's institutional account.

**Selection of Recipients and Allocation of Awards:** The Federal Pell Grant Program is an entitlement program. The applicant must be enrolled as an undergraduate student in an approved post-secondary institution and must need financial assistance to continue his/her education.

Financial need is determined by a formula applied to all applicants. It was developed by the U.S. Office of Education and is reviewed annually by Congress. Expected Family Contribution is calculated by this formula.

Federal Pell Grants are paid for up to six years as required to complete a first baccalaureate degree. Awards may be used for tuition, fees, books and living expenses.

**Award Schedule:** Pell grants are awarded each year the financial need and academic progress requirements are met by the student. The amount of the award will be affected by costs of attendance and enrollment status. The Pell award is not duplicative of State awards.

**Responsibilities of Recipients:** The student must continue to make satisfactory academic progress in the program in which he/she is enrolled. The student must not owe any refunds on a Federal Pell Grant or other awards paid, or be in default on repayment of any student loan.

## **Teacher Education Assistance for College and Higher Education Grant Program (TEACH)**

**Application Procedures:** Students must apply by filing the Free Application for Federal Student Aid (FAFSA). The completed application should be submitted for processing according to the directions included on it. A Federal Student Aid Report will then be sent to the applicant. All TEACH Grant recipients must complete Entrance Counseling and sign the TEACH Grant Agreement to Serve each year before the funds are credited to the student's institutional account.

**Selection of Recipients and Allocation of Awards:** The TEACH grant program provides grants of up to \$4,000 per year to students who intend to teach as a full-time teacher in a high need field in a public or private elementary and secondary school that serves students from low-income families. To be eligible, the student must:

- Be a US Citizen or eligible non-citizen;
- Be accepted into Siena's Teaching Certificate program (exceptions may apply);
- Be enrolled in coursework that is necessary to begin a career in teaching or plan to complete such coursework. Such coursework may include subject area courses (e.g., math courses for a student who intends to be a math teacher);
- Meet certain academic achievement requirements (generally, scoring above the 75<sup>th</sup> percentile on a college admissions test or maintaining a cumulative GPA of at least 3.25); and
- Sign a TEACH Grant Agreement to Serve each year the TEACH Grant is received.

*High-Need fields offered at Siena are in the following subject areas:*

- Foreign Language
- Mathematics
- Science

*Schools Serving Low Income Students:*

Schools serving low-income students include any elementary or secondary school that is listed in the Department of Education's Annual Directory of Designated Low-Income Schools for Teacher Cancellation Benefits.

**Award Schedule:** The full- and part-time students are eligible. The maximum grant is reduced for part-time students. Second Baccalaureate students are not eligible to receive the TEACH Grant.

**Responsibilities of Recipients:** In exchange for receiving a TEACH Grant, the recipient must agree to serve as a full-time teacher in a high need field in a public or private elementary or secondary school that serves low-income students. The recipient must teach for **at least four academic years within eight calendar years** of completing the program of study for which a TEACH Grant is received.

**IMPORTANT: If the recipient fails to complete the service obligation, all amounts of the TEACH Grants received will be converted to a Federal Direct Unsubsidized Stafford Loan. The recipient must then repay this loan to the US Department of Education and will be charged interest from the date the grant(s) was disbursed.**

**Once the grant is converted to a loan it cannot be converted back to a grant.**

### **Federal Supplemental Educational Opportunity Grants (SEOG)**

**Application Procedures:** Students must apply by filing the Free Application for Federal Student Aid (FAFSA). The Financial Aid Office is responsible for awarding SEOG to those students demonstrating the lowest expected family contributions, with preference given to those who are also Federal Pell Grant recipients.

**Selection of Recipients and Allocation of Awards:** The applicant must show extraordinary financial need, determined by a federally approved needs analysis system.

**Responsibilities of Recipients:** The student must continue to make satisfactory academic progress.

#### **Federal Perkins Loans**

**Application Procedures:** Application must be through filing the Free Application for Federal Student Aid (FAFSA). The Financial Aid Office is responsible for determining who receives a Perkins Loan. Information on loan deferments and cancellation provisions for borrowers who go into certain fields of teaching or specified military duty, are available from Student Accounts, which administers repayment of Perkins Loans. All first time Federal Perkins loan borrowers must complete a Master Promissory Note (MPN) and Entrance Counseling before their loan is certified by the Financial Aid Office

**Selection of Recipients and Allocation of Awards:** Loans are available to students based on financial need. Students must be enrolled at least half-time in approved postsecondary institutions.

**Responsibilities of Recipients:** Continued eligibility is dependent on the maintenance of satisfactory academic progress and demonstrated financial need. The current interest rate, payable during the repayment period, is 5.0% on the unpaid principal. Repayment begins nine months after graduation or leaving school, and may extend up to 10 years. Payment is not required for up to three years of active U.S. military service, or service in the Peace Corps, VISTA or similar volunteer service in a private non-profit organization, temporary total disability, service in an internship preceding a professional practice. An institution, under certain conditions, may extend the repayment period up to 10 additional years for low income individuals.

#### **Federal College Work-Study Program (FCWS)**

**Application Procedures:** Students must apply by filing the Free Application for Federal Student Aid (FAFSA). Eligibility is determined and work arrangements made by the Financial Aid Office. Students locate available positions through the Career Center job portal, CareerSaint. Available positions are updated throughout the academic year.

Students must complete required tax forms and authorization forms before starting in their position. Additional information is provided on the Siena College Financial Aid website.

**Selection of Recipients and Allocation of Awards:** The applicant must be matriculated at Siena on at least a half-time basis and must demonstrate financial need. Recipients will earn a pre-determined hourly rate and are paid on a biweekly basis.

**Responsibilities of Recipients:** Satisfactory academic progress must be maintained. Work must be performed when classes are not in session. Signed time cards must be submitted to Student Accounts on a bi-weekly basis.

#### **Reserve Officer Training Corps (ROTC)**

The Army, Navy and Air Force offer financial assistance to qualified students. The Army offers full tuition plus mandatory fees. The Navy and Air Force offer scholarships that may cover full tuition, plus fees and books. A monthly stipend may also be awarded. Students with Army ROTC scholarships fulfill the military component of their scholarship at Siena. Students with either a Navy or Air Force scholarship take their military science courses at Rensselaer Polytechnic Institute in Troy. As benefits and regulations differ from Army ROTC, contact the Rensselaer Polytechnic Institute, AFROTC Detachment 550, (518) 276-6236.

#### **United States Bureau of Indian Affairs Aid to Native Americans Higher Education Assistance Program**

**Application Procedures:** Application forms may be obtained from the Bureau of Indian Affairs Office. An application is necessary for each year of study. An official needs analysis from the college Financial Aid Office is also required each year.

Each first-time applicant must obtain tribal enrollment certification from the Bureau agency which records enrollment for the tribe.

**Selection of Recipients and Allocation of Awards:** To be eligible, the applicant must (1) be at least one-fourth American Indian, Eskimo or Aleut; (2) be an enrolled member of a tribe, band or group recognized by the Bureau of Indian Affairs; (3) be enrolled in or accepted for enrollment in an approved college or university, pursuing at least a four-year degree; and (4) have financial need.

**Responsibilities of Recipients:** For grants to be awarded in successive years, the student must make satisfactory progress toward a degree, and show financial need. Depending on availability of funds, grants may also be made to graduate students and summer session students. Eligible married students may also receive living expenses for dependents.

United States Department of Interior  
Bureau of Indian Affairs  
New York Liaison Office  
Federal Building, Room 523  
100 South Clinton Street  
Syracuse, NY 13202

#### **Veterans Administration (VA) Education Benefits**

To apply, contact your local Veterans Administration Assistance Agency (under U.S. Government), or call toll free 1-888-GIBILL1 (1-888-442-4551).

Certification of Veterans Administration forms regarding attendance at the College or general information regarding veterans benefits may be secured by calling, writing or visiting the Office of the Registrar, Siena College, 515 Loudon Road, Loudonville, New York 12211-1462.

#### **Institutional Refunds**

Refunds of Institutional charges will be given in the following areas:

**Tuition:** Tuition will be refunded on a proportionate basis according to the following schedule:

FALL AND SPRING SEMESTERS	
Two weeks or less	80%
Three weeks	60%
Four weeks	40%
Five weeks	20%
Over five weeks	No refund

**Housing Rate:** If a resident student withdraws during a semester, he or she will be refunded in accordance with the terms specified in the housing license .

**Meal Rate:** The College will refund dining charges on a pro-rated basis based upon the date the student withdraws from the college.

**Other Fees:** Other fees will not be refunded in whole or in part.

Students who receive financial aid from Siena College funds and terminate their studies before the end of a semester may be required to refund a portion of their Siena aid resulting from their termination. The amount of Siena College funds required to be refunded to the College will be calculated on a proportionate basis according to the tuition refund schedule.

## Return of Federal Refunds

Federal Title IV Fund recipients who terminate their studies before the end of a semester may be required to refund a portion of their aid resulting from their termination. Students should see a financial aid officer before withdrawing to determine the effect on their current or future financial aid.

A student who finds it necessary to withdraw from all courses before the conclusion of the fall or spring semester or summer sessions must first obtain a withdrawal form from the appropriate School office. After full-time students have obtained the withdrawal form, they must consult with the appropriate school Dean. The withdrawal form must be signed by the School Dean, and returned to the Office of the Registrar. After part-time students have obtained the withdrawal form, they must consult with the Academic Advising Support Center. A resident student must also advise his or her residence hall director. The date of withdrawal will be the later of the students documented last date of attendance at an academically related activity or the date indicated by the student as their intended withdrawal date when the student submits a written statement of withdrawal. If the student fails to complete the withdrawal process, the withdrawal date will be the midpoint of the payment period.

### Allocation of Costs:

The following costs are classified as Institutional Costs:

- Tuition
- Fees
- Room and Board (if contracted with the institution)
- Books and Supplies

The following costs are classified as Non-Institutional Costs:

- Room and Board (not contracted with the institution)
- Personal and Transportation
- Dependent Care
- Disability
- Health Services/Pharmacy Charges
- Library Fines
- Parking Fines

### Return of Federal Funds - Institutional Responsibility:

Federal Regulations require that the institution return federal aid for students with an official date of withdraw on or before the 60% point of the payment period to the federal government. The amount to be returned is the lesser of the following:

Total federal aid \$ disbursed or that could have been disbursed  
X (# of days remaining in payment period/# of days on payment period)  
= Total federal aid \$ unearned

OR

Total institutional charges incurred for the payment period  
X (# of days remaining in payment period/# of days on payment period)  
= Total federal aid \$ unearned

### Return of Federal Funds - Student Responsibility:

Federal Regulations require that a student return or repay, remaining unearned federal aid based on the following formula:

Total federal aid \$ disbursed  
Less: Total Federal aid \$ earned  
Less: Federal aid \$ returned by the institution  
Basis for Student Repayment

\*Less: All outstanding federal loans for the current academic year

Basis of Federal Grant Funds for Student Repayment

X 50%

= Total Federal Grant funds student is required to repay

**\*Note:** If the funds that are required for student repayment are loan funds, the loans should be repaid according to the terms and conditions outlined in the promissory note signed by the borrower. If the funds are grant funds, call 800-4-FED-AID (800-433-3243) to make arrangements to repay these funds.

Refunds and Repayments must be distributed in the following order:

1. Unsubsidized Federal Direct Loans
2. Subsidized Federal Direct Loans
3. Federal Perkins Loan
4. Federal Direct PLUS Loan
5. Federal Direct PLUS Loans
6. Federal Pell Grants
7. Federal Supplemental Educational Opportunity Grants
8. Other grant or loan assistance authorized by Title IV of the HEA

The information in this catalog is accurate as of April 2013. Since program changes may occur, students should always check with the Financial Aid Office for updated information.

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