

UNDERGRADUATE DEPARTMENTS AND PROGRAMS

Department of Africana Studies

Elizabeth Amelia Hadley, **Chair and Associate Professor**

Christina Brinkley, **Associate Professor**

Marie McHugh, **Staff Assistant**

The intellectual domain of Africana Studies (AST) consists of four major areas:

1. The study of African and European American relationships beginning in the sixteenth century;
2. The study of African/African American community building, i.e., African Americans' founding and organization of economic, educational, religious, and cultural institutions and related achievements of self-determination;
3. Africana women's studies and the study of US women of Native American, Hispanic, and Asian descent; and,
4. Africinity and diaspora studies in the Americas, Africa, and Europe.

Each of these areas may be examined further by focusing upon specializations in the humanities (e.g., literature, film, journalism), social sciences (e.g., research, public policy, health care), physical sciences (e.g., environmental studies), or interdisciplinary studies (e.g., women's studies, management, education). An AST major or minor is appropriate for students with strong interests in studies of Americans of color; the study of race, gender, and class in the humanities or social sciences; or one or more subject areas indicated above.

The department prepares students for the labor market and continued professional and graduate training by providing a solid knowledge foundation of critical, analytical, and technological

skills. Pre-graduation internships are available for all interested students. Study abroad and modern language skills are highly recommended. Students interested in dual degree programs or self-designed majors should consult with department faculty to design an individualized program.

Simmons has had a major in Africana studies for more than twenty years. The department also offers a major with a specialization in Africana women's studies and a minor in AST.

Majors

1. A major in Africana studies.

This course of study is for students who want to pursue a liberal arts major in Africana studies. Students who anticipate professional careers or graduate study in liberal arts should consider this major track.

The major requires thirty-six semester hours comprising the following:

- AST 101 Introduction to Africana Studies
- AST 102 Social and Psychological Developments of African Americans
- AST 103 African American Intellectual History
- Eight semester hours contributing to an interdisciplinary knowledge of Africana studies, no more than four hours of which may be taken in any one department. Courses that count toward the satisfaction of this requirement include AST 210, AST/SOCI 234, AST 300, AST 325, AST 330, AST 335, ART 255, ENGL 176, MGMT 131, PHIL 223, and POLS 215.

- Eight semester hours of electives. Courses listed under the "interdisciplinary knowledge" requirement may count as electives only if they are not counted toward the satisfaction of the "interdisci-

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

plinary knowledge” requirement. Other electives are ART 251, HIST 213, HIST 217, POLS 211, POLS 242, SOCI 249, AST 350, AST 355, and AST 370.

- Eight semester hours from AST 350, AST 355, or AST 370.

2. A major with a specialization in Africana women.

This course of study is for students who wish to develop sophisticated theoretical tools to study the complex relationships among race, sex and gender and to apply those tools specifically to the study of Africana women and all women of color. This major requires thirty-six hours comprising the following:

[NOTE: If a student elects a particular track within the major (e.g. communications, literature and theater, health, or public policy), then electives and interdisciplinary courses may differ from those listed below. She should consult with her adviser].

- AST 101 Introduction to Africana Studies
- AST 102 Social and Psychological Development of African Americans
- AST 103 African American Intellectual History
- AST 210 African American Women
- AST 235 Biography and Autobiography
- AST 325 Critical Race Feminism/Womanism
- AST 335 Race, Sex, and Class: Contemporary Film Images of Women of Color

- Twelve semester hours from AST 300, PHIL 223, SOCI 210, SOCI 249, WST 304, HIST 210, HIST 211, or HIST 215 (at least four semester hours of which should be WST 304 or SOCI 210 or HIST 215).

- Eight semester hours of independent learning from AST 350, AST 355, or AST 370.

Minor in Africana Studies

The AST minor requires AST 355 or AST 300; AST 101, AST 102, or AST 103; and three additional courses at the 200 or 300 level.

COURSES

AST 101 Introduction to Africana Studies (M5) (F-1,2)

4 sem. hrs.

Introduces the study of peoples of African descent using analytical tools derived from and/or applicable to those experiences. Provides a critical examination of those concepts, theories, methodologies, and models of inquiry of the traditional disciplines that have suffered from Eurocentric biases in their treatment of the African world experience. Staff.

AST 102 Social and Psychological Development of African Americans (F-2)

4 sem. hrs.

Focuses on current theory and research pertaining to the psychological development of black children, adolescents, and adults. Topics include educational achievement, sex role differences, and the development of gender and ethnic identities. Also examines traditional African American institutions, especially the church. Ward.

AST 103 African American Intellectual History (F-2)

4 sem. hrs.

Surveys African American thought from the nineteenth century to the present. Topics include the DuBois-Washington debate, Ida B. Wells's analysis of lynching, the philosophical foundations of Locke's cultural pluralism, Garveyism, the political justifications of Black Power, the concept of a black aesthetic, the new formalist criticism of African American literature, contemporary black feminism/womanism, and recent disputes between black neo-conservatives and their critics. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

AST 104 Early Aframerican Writers (F-2)

4 sem. hrs.

Studies the works of early writers of the mid-nineteenth century to expose students to the rich and diverse literature created by African American women. Examines ideologies, class, and gender in a variety of genres embraced by these women, including slave narratives, interviews, magazine novels, and spiritual autobiography. Hadley.

AST 150 Black Drama I: The African Grove Theatre to Civil Rights (1821-1950s) (M1) (F-1,2)

4 sem. hrs.

Studies the black experience in theater created by, for, and about African Americans. Examines theater practices and movements, e.g., "Stock Companies, Pageants, and Folk Plays"; "The Harlem Renaissance"; and "African American College Theater," to explore the diverse modes of creativity embraced by black theater artists who contributed to and augmented American theater practices, although they were excluded from that venue. Hadley.

AST 151 Black Drama II: Civil Rights to the Present (1950s-) (M1) (S-1,2)

4 sem. hrs.

Studies the black experience in theater created by, for, and about people of African descent globally. Examines socio-political movements, such as the civil rights, black arts, black militant, and black women playwrights, to discern their impact on black theater and on political and artistic national consciousness. Develops analytical skills through the study of theater critics and scholars as they respond to developing trends in black drama. Hadley.

AST 210 African American Women (S-1,2)

4 sem. hrs.

Emphasizes a sociological perspective that explores the intersection of biography, history, and the social structure in the lives of African American women of various geographic and class backgrounds. Topics include economic status and work, artistic creativity, family roles and sexuality, and social activism. Staff.

AST/SOCI 234 The Black Experience in America (F-1,2)

4 sem. hrs. Prereq.: SOCI 101 or consent of the instructor.

Examines the dimensions and patterns of African American experiences in historical and contemporary political/legal and economic perspectives. Principal topics include European American constructions and institutionalization of discriminatory belief and behavioral systems; generational effects in politics, economics, media, and education; analogous experiences of Native, Hispanic, and Asian Americans; and shaping agendas for economic and political empowerment. Brinkley.

AST 235 Biography and Autobiography (F-1)

4 sem. hrs.

Examines the achievements of women writers of color in reference to their efforts to preserve their cultural heritages while facing adversity, oppression, and physical and cultural genocide. Further explores general conditions and motivations germane to the creation of these works in an effort to encourage students to constructively analyze and discuss literary works by women of color. Hadley.

AST/SOCI 250 Demographics: People, Places, and Issues (F-1,2)

4 sem. hrs.

Discusses demography—the study of the size, structure, and spatial distribution of populations. Focuses on the study of fertility, mortality, migration, and the environment as products of societies and as factors that may shape societal change. Reviews demographic analytical techniques. Opportunity to develop demographic profiles of a community, of a particular country, or in relation to a particular area of public policy. Brinkley.

AST 265 History of Blacks in Media and Press (M5) (S-1,2)

4 sem. hrs.

Examines the history of black involvement in media and press in fiction and nonfiction, from print to electronic media, from race records to rap music, from stage to screen, and from television to advertisements. Hadley.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

AST 300 Seminar in Selected Topics in Africana Studies (S-1,2)

4 sem. hrs.

Offers an intensive study of a selected topic in Africana studies. Staff.

AST/SOCI 311 Critical Race Legal Theory (F-1)

4 sem. hrs. Prereq.: AST 101, PHIL 226, SOCI 249, or consent of the instructor.

Chronicles critical race theory as an intellectual field created in dialogue with dominant racial and legal constructions since the civil rights movement in the United States. Gives particular attention to key contemporary legal and political debates about affirmative action, assaultive speech, land rights, the punishment industry, violence against women, and multi-cultural education. Brinkley.

AST 325 Critical Race Feminism/Womanism (F-1, S-2)

4 sem. hrs.

Focuses on law, language, and public policy in theory and in practice as related to African American women. Addresses questions including: What is the meaning of liberty and rights in the lives of African American women? How do history and experience interact to affect black women's lives? What role does quantitative analysis play as method for critical race womanism and related public policy? Brinkley.

AST 330 Knowledge, Research Processes, and African Americans (S-2)

4 sem hrs.

Considers how knowledge is "created" in a racist-sexist culture. Offers a methodological and sociological examination of research processes, products, and effects of the knowledge industry generally and particularly in regard to African American women and men. Addresses questions including: What is knowledge? Myth? Belief? Who are the producers? What is/are the relationship/s among "definers," (mis)(dis) information, public policy, and solving/not solving societal issues? Brinkley.

AST 335 Race, Sex, and Class: Contemporary Film Images of Women of Color (S-1,2)

4 sem. hrs.

Examines popular film as a powerful medium but-tressing subliminal ideologies in the continuing subjugation of women of color. Critically analyzes "Hollywood"-produced films and historical and sociological data to develop perspective on how and why stereotypes of women of color endure in films specifically and media in general. Hadley.

AST 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the instructor. Supervised by a member of the department.

AST 350-1, 2 Independent Study (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the instructor. Supervised by a member of the department.

AST 355 Senior Thesis (F-1,2; S-1,2)

8 sem. hrs. Prereq.: Consent of the instructor. Supervised by a member of the department.

AST 370 Internship (F-1,2; S-1,2)

8 sem. hrs. Prereq.: Consent of the AST chair.

Offers work experience in a legislative, administrative, or direct services agency that addresses issues relevant to the lives of African Americans. Staff.

Honors Program

An honors program is offered to eligible students according to the College requirements on page 27. Majors with a minimum 3.30 cumulative grade point average and a 3.30 grade point average within the Department of Africana Studies are eligible for the departmental honors program.

F =
Fall
S =
Spring
U =
Summer
STC =
Short-Term Course
1 =

Department of Art and Music

*Gregory Slowik, **Chair and Associate Professor**

*Dana Chandler, **Professor**

Robert Oppenheim, **Professor**

Joyce Cohen, **Assistant Professor**

Margaret Hanni, **Assistant Professor**

Wendy Seller, **Assistant Professor**

Vaughn Sills, **Assistant Professor

Randolph Borden, **Lecturer**

Edie Bresler, **Lecturer**

Bridget Lynch, **Lecturer**

Richard Bunbury, **Director of Chorale**

Christine Kr omer, **Administrative Assistant**

**On leave fall semester 2002.*

***Chair fall semester 2002.*

The Department of Art and Music offers a major in art, an interdepartmental major in arts administration, and two tracks in the music major.

ART

Courses in art are designed to strengthen the student's perceptual powers and to develop articulate visual intelligence in art history through study of works of art and in studio work through direct practice in drawing, painting, and photography. Such study complements other areas of study and practice in the humanities. Students in sciences and professional areas also benefit from strengthening their powers of visual thinking and discovering that active visual imagination is crucial to creative work.

Major in Art

The major in art includes courses in art history and studio art practice. Either area may be emphasized, depending upon interest and career plans. Either emphasis can serve as a foundation for further study at the graduate level in either art history or practice.

The study of art can lead to careers in a wide variety of fields, such as teaching, publishing, arts

administration, museum or gallery work, commercial art and design, architecture, city planning, painting, photography, or printmaking, etc. In many of these areas, the major in art would profitably be combined with a major in another area, such as English, history, philosophy, management, communications, or mathematics. Students are advised to consult with a member of the department on possible combinations suitable for different career plans.

There is no strict sequence in which art history courses must be taken, although the introductory courses ART 141 and 142 are normally taken first. In studio art, eight semester hours at the introductory level are required prior to work in painting and printmaking.

Requirements : Students are required to take twenty-eight semester hours in art, exclusive of the independent learning requirements, distributed as follows:

- Two courses in art history
- Two courses in art practice, and
- Remaining courses in either art history or art practice, depending upon interests.

The independent learning requirement may be taken in art or another field.

Interdisciplinary Major in Arts Administration

The Department of Art and Music offers this interdepartmental major in conjunction with the Departments of Management and Communications. This major provides an opportunity for students to prepare for careers in the arts, including management; public relations; promotion and marketing; budgeting; art or music editing in museums or publishing houses; and management of public and corporate art activity, foundations, art galleries, and concert halls. A student may choose courses in art or music, depending upon her strengths and interests. Internship experience in one of these areas is an integral part of ART 390, which is required. The major offers a choice of emphasis in either management or communications. Departmental

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

advising assists students in selecting the track appropriate for their career goals.

Requirements: Students are required to take fifty-two semester hours including thirty-two in art or music and twenty in either management or communications as listed below.

Art

- ART 111 Introduction to Studio Art: Drawing
- ART 112 Introduction to Studio Art: Color
- ART 141 Introduction to Art History: Egypt to Mannerism
- ART 142 Introduction to Art History: Baroque to the 20th Century
- ART 143 State of the Arts: An Introduction to Arts Administration
- ART 390 Arts in the Community

One elective in art history

Music

- MUS 120 Introduction to Music: The Middle Ages to Early Romanticism
- MUS 121 Introduction to Music: Early Romanticism to the Present
- ART 143 State of the Arts: An Introduction to Arts Administration
- ART 390 Arts in the Community

Three electives in music history, theory, or performance.

Students who entered prior to fall 2002 should consult with an adviser regarding changes in requirements for arts administration.

Communications Track

- COMM 122 Writing and Editing Across the Media
- COMM 186 Introduction to Public Relations/Marketing Communications
- COMM 281 Writing for Public Relations and Integrated Marketing Communications

and two of the following courses:

- COMM 120 Communications Media
- COMM 121 Visual Communications
- COMM 123 Communications Technologies
- COMM 124 Media, Messages, Society
- COMM 210 Introduction to Graphic Design: Principles and Practices (*requires COMM 121*)
- COMM 220 Video Production (*requires COMM 120 or consent*)
- COMM 244 Design for the World Wide Web (*requires COMM 121, 123, and 210*)
- COMM 260 Journalism
- COMM 310 Feature Writing (*requires COMM 122*)

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Management/Finance Track

- MGMT 100 Introduction to Management
- MGMT 110 Principles of Accounting
- MGMT 260 Principles of Finance

and two of the following courses:

- MGMT 125 The Manager and the Law
- MGMT 221 Managing the Diverse Workforce
- MGMT 234 Organizational Communication and Behavior
- MGMT 243 Special Topics in Global Management
- MGMT 286 Management Information Systems

Recommended:

- ECON 100 Principles of Microeconomics
- ECON 101 Principles of Macroeconomics
- MATH 118 Introductory Statistics

Management/Marketing Track

- MGMT 100 Introduction to Management
- MGMT 110 Principles of Accounting
- MGMT 250 Principles of Marketing

and two of the following courses:

MGMT 221	Managing the Diverse Workforce
MGMT 230	Consumer Behavior
MGMT 231	Managing Marketing Communications
MGMT 233	Sales/Sales Management
MGMT 234	Organizational Communication and Behavior
MGMT 236	Retail Management
Recommended:	
ECON 100	Principles of Microeconomics
ECON 101	Principles of Macroeconomics
MATH 118M	Introductory Statistics

Minors in Art

An art minor may emphasize either studio art or art history:

- Art History: ART 111 or 112 and four art history courses;
- Studio Art: one art history and four studio art courses.

ART 100 will be accepted for the art minor.

Minor in Arts Administration

An arts administration minor may emphasize either music or art along with courses in management or communications. The minor requires ART 143, one communications or management course from those required for the arts administration major, and either three art history courses or three music courses in history or theory.

Minor in Photography

A minor in photography requires the following:

- ART/COMM 138;
- Three additional photography courses chosen from ART/COMM 231, 232, 237, or 239 or ART 234 or 330; and
- Either ART 249, ART 254, COMM 200, or PHIL 132.

COURSES

Art Studio Courses

ART 111 Introduction to Studio Art:

Drawing (M1) (F-1,2; S-1,2)

4 sem. hrs.

Introduces basic pictorial concepts and techniques while investigating or interpreting sources such as portraits, landscapes, still life, and interior and architectural space. Uses slides, critique, and homework assignments to expand on skills developed in class and provide insight into cultural and historical context in which stylistic development takes place. Requires no previous studio experience. Chandler, Lynch, Oppenheim, Seller.

ART 112 Introduction to Studio Art: Color

(M1) (F-1,2; S-1,2)

4 sem. hrs.

Investigates the role of color in perception and in pictorial structure through studio work in painting. Also uses slides to depict works of art from different periods and cultures and considers the relation between the cultural and historical situation of the artistic and stylistic development. Requires no previous experience, although ART 111 is strongly encouraged. Seller.

ART 119 Introduction to Sculpture (M1)

(F-1,2; S-1,2)

4 sem. hrs.

Introduces students to a hands-on experience with the design and creation of small abstract sculpture. Explores a broad range of natural and manufactured materials (found and neglected objects, wood, metal, plastics, etc.) and sometimes combines them to create wall hangings, mobiles, reliefs, and free-standing sculptures. Requires no previous studio experience. Chandler, Lynch, Seller.

ART/COMM 138 Basic Photography (M1)

(F-1,2; S-1,2)

4 sem. hrs.

Teaches the art and craft of contemporary black-and-white photography. Emphasizes how to use a camera, develop negatives, and make prints in order to create images that are visually powerful and sig-

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

nificant to the photographer and her audience.
Bresler, Sills.

ART 182 Pictorial Language (U-1,2)

4 sem. hrs.

Introduces basic design elements; means of creating the illusion of volume and space; pictorial language and the use of symbols and other vehicles to express an idea; and impact of color, surface texture, and materials. Emphasizes process over product. Includes group critiques and presentations on contemporary and historical artists. Oppenheim, Seller.

ART 183 Drawing the Human Figure

(F-1,2; S-1,2)

4 sem. hrs.

Offers a more animated perspective to a spatial environment than ART 111. Requires no previous studio experience and covers techniques and concepts that may overlap basic drawing. Includes work with a live model in numerous contexts and explores a broad range of media and techniques. Relates the figure to other figures, an environment, or more conceptual interpretations. Oppenheim, Seller, Chandler.

ART 211 Advanced Drawing (S-1,2)

4 sem. hrs.

Builds on skills gained in ART 111, with advanced work in figure, still life, landscape, and abstract drawing. Emphasizes graphic and conceptual inventiveness leading to the capacity for individually realized expression in various media. Seller.

ART 213 Painting I (S-1,2)

4 sem. hrs.

Teaches basic techniques of painting. Work includes still life, figure, and abstract painting. Emphasizes color as it relates to both individual expressive needs and pictorial structure. Lynch, Oppenheim.

ART 215 Screen Printing (F-1)

4 sem. hrs.

Teaches basic screen techniques, including construction and preparation of screens and various methods of screen printing. Borden.

ART 217 Introduction to Printmaking I (M1)

(F-2)

4 sem. hrs.

Teaches techniques used in making prints, including etching, drypoint, calligraphy, and engraving. Experiments with a variety of methods for transforming individual designs and drawings into prints. Studies examples from artists like Rembrandt, Picasso, and Mary Cassatt who explored the print medium. No previous experience in studio art required. Chandler.

ART 220 Photo Screen Printing (S-1)

4 sem. hrs.

Introduces a variety of photo screenprinting techniques and encourages translation of photographic imagery into expressive and personal statements. Designed for students without prior experience in photography or screen-printing. Borden.

ART 221 Printmaking: Creative Bookmaking (S-2)

4 sem. hrs.

Introduces bookmaking as a form of visual expression with an emphasis on printmaking. Techniques for creating images include screen-printing, collage, and monoprinting. Covers basic bookbinding concepts. Borden.

ART 222 Nonrepresentational Painting (F-1,2)

4 sem. hrs.

Introduces nonobjective/abstract painting through a series of problems that encourage individual expression and exposure to contemporary pictorial concepts. Uses collage and paint to explore concepts and techniques that break the boundaries of representation. Presents examples from both slides and original sources. No prior experience required, but courses in drawing and color are helpful. Oppenheim.

ART/COMM 231 Alternative Processes in Photography (F-2)

4 sem. hrs. Prereq.: ART/COMM 138 or consent of the instructor.

Offers experimentation with non-traditional techniques and equipment to make photographic images using hand-made and "toy" cameras (as well as 35mm cameras), found pictures, and Xerography to make negatives. Printmaking includes toning, hard color-

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

ing, Polaroid transfers, cyanotypes, and Van Dyke processes. Class time divided among lab work, discussion of historical and contemporary alternative photography, and critiques of student work. Sills.

[ART/COMM 234 (STC) Photog raphy in Paris: Art, Exploration, and Self (M1)

4 sem. hrs. Not offered in 2002-04]

Explores with camera and pen the culture(s) of Paris. Looks at the ordinary life and the extraordinary art of Paris – in museums and galleries, in cathedrals and palaces and parks, on the street, and in cafes and flea markets. Reflecting upon discoveries and impressions, students create photographic art about Paris and the experience of exploration. Enables students 1) to use the camera and photographic processes with skill to foster their creative potential and to heighten visual awareness, 2) to use the process of creating art to learn about another culture, and 3) to gain familiarity with and appreciation for historical and contemporary photography of France. Sills.

ART/COMM 237 Advanced Photog raphy Workshop (S-1; F-2)

4 sem. hrs. Prereq.: ART/COMM 138.

Provides students an opportunity to develop their photographic vision through a study of different techniques, a refinement of exposing and developing skills, and projects designed to express ideas and imagination. Readings and study of other photographers' work are included. Sills.

ART/COMM 239 Documentary Photog raphy (S-1)

4 sem. hrs. Prereq.: ART/COMM 138.

Offers an opportunity to use photography to describe, understand, and interpret the world around us by creating photographic essays on subjects of students' choosing. Gives attention to refining technical skills while delving into aesthetic issues of significance and meaning in images. Studies the documentary tradition as a basis to develop work. Sills.

ART/COMM 330 Special Topics in Photog raphy (S-2)

4 sem. hrs. Prereq.: ART/COMM 138 and two additional photography courses or consent of the instructor.

Delves deeply into the practice and theory of photography. General topic is contemporary photography, with readings by Barthes, Sontag, and other theoreticians considered in relation to the work of students and contemporary photographers. Sills.

ART/COMM 256 A pproaches to Indi vidual Expression in Photog raphy (F-1)

4 sem. hrs. Prereq.: ART/COMM 138.

Expands explorations in photography through self-designed photographic projects. Refines visual and technical skills. Includes two or three long-term projects, critiques, discussion of the work of art photographers, visits to exhibitions, and technical exercises. Sills.

ART/COMM 258 Digital Color Photog raphy (S-2)

4 sem. hrs. Prereq.: ART/COMM 138.

Designed for students to learn both digital imaging and color photography using Adobe Photoshop. Employs traditional and/or digital cameras to create digitally realized "straight" prints and to manipulate photo-based imagery using Photoshop. Staff.

Art History Courses

ART 100 Objects and Ideas: A Museum History of Art (M1) (F-1,2; S-1,2)

4 sem. hrs.

Introduces the history of art based on the world-class museum collections in the Boston area. Includes slide lectures and weekly field trips to Boston-area museums and galleries, including the Museum of Fine Arts, Harvard Art Museums, the Institute of Contemporary Art, the Gardner Museum, and others. Not be counted towards the art major. Cohen, Hanni.

ART 141 Introduction to Art History: Egypt to Mannerism (M1) (F-1,2)

4 sem. hrs.

Introduces students to the art of various cultures. Explores the idea of art as a visual language, why people make art, what purpose art serves, and how

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

art reflects values and ideas. Discusses painting, sculpture, and architecture ranging from the Egyptian pyramids to Michelangelo's Sistine Ceiling. Includes frequent visits to the Museum of Fine Arts and the Gardner Museum. Hanni.

ART 142 Introduction to Art History: Baroque to the 20th Century (M1) (S-1,2)
4 sem. hrs.

Introduces paintings, sculpture, and architecture from Europe and the United States made between 1600 and the present. Explores the careers of key artists and interprets objects from this period, considering such issues as obstacles and opportunities for women artists at various periods, changing views on what art should accomplish in society, and the development of unconventional approaches to art during this century. Uses the collections of the Museum of Fine Arts and the Gardner Museum to study the work of such important artists as Rembrandt, Goya, Cassatt, Monet, O'Keeffe, Warhol, and others. Hanni.

ART 143 State of the Arts: An Introduction to Arts Administration (M1) (F-1,2)
4 sem. hrs.

Studies cultural organizations, their functions, and their roles in a changing society. Instruction emphasizes "backstage" exposure to organizations and programs in the greater Boston area through site visits, guest lecturers, readings, and discussion. Topics include management in the museum and performing arts institution, the nonprofit arts organization, the marketplace for the arts, multiculturalism in the arts, public funding, and public art. Cohen.

ART 174 (STC) Collecting Culture: Perspectives on Art Collections in Britain (M1) (S-1)
4 sem. hrs.

Studies significant collections of art and antiquities in museums, galleries, and country houses in and near London; how they were formed; and their relationship to changing social and political contexts in Britain. Topics include classical and Assyrian art at the British Museum in relationship to empire building in eighteenth- and nineteenth-century England, portraiture as a document of changing aristocratic ideals and national identity, and the Victoria and Albert Museum as an example of social reform. Hanni.

ART 210 Architecture of Boston (F-1)
4 sem. hrs.

Uses Boston and Cambridge to explore the history and theory of modern and pre-modern American and European architecture. Considers such landmarks as Richardson's revivalist Trinity Church, Pei's international-style Hancock Tower, and Le Corbusier's sculptural Carpenter Center within the wider context of significant development. Lectures and museum and site visits required, as well as walking tours exploring Boston as architecture and urban design. Staff.

ART 236 Arts Administration Institute/
New York City (U-1,2)
4 sem. hrs. Prereq.: Consent of instructor.

Offers first-hand experience of the rich cultural landscape of a major urban center in a four-week on-site experiential program that focuses on the following questions: What new relationships are emerging between art markets, philanthropy, public funding, and nonprofit arts organizations? What is the nature of "the public trust" in the art world of the twenty-first century? How do arts organizations balance tradition and change in a multicultural and global environment? What roles do arts administrators play in linking the arts to their audiences? Combines readings, research activities, guest speakers, and visits to events and programs. Cohen.

ART 243 Art in Europe: 1750-1900 (F-1)
4 sem. hrs.

Focuses on artists such as Vigee-Lebrun, Cassatt, Manet, Cezanne, and Van Gogh and how they revolutionized subjects and styles of art. Topics include romanticism and realism in painting, the development of Impressionism, and influences of photography on art after 1840. Studies the French Impressionist and nineteenth-century painting collections of the Museum of Fine Arts. Hanni.

ART 244 20th-Century Art (M1) (F-2)
4 sem. hrs.

Explores Cubism, Surrealism, and abstraction in modern art. Considers the motivations behind these movements and their relationship to social and technological changes and to the traditions of art history. Augments investigation of paintings, sculpture, and architecture with letters, journals, and poetry by

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

artists such as Matisse, Picasso, Frida Kahlo, Louis Kahn, Jackson Pollock, and Audrey Flack. Uses local museums for further study. Hanni.

ART 245 American Art (M1) (S-2)

4 sem. hrs.

Studies painting, photography, sculpture, and architecture from the Colonial period to the twentieth century. Considers how the nation during various historical periods defined and presented itself through art. Explores the experiences of women artists in America and the role of the US in the international art world. Investigates themes of portraiture, landscape, and the development of modernism. Examines artists such as Copley, Sargent, Homer, Cassatt, and O'Keeffe at the Museum of Fine Arts. Hanni.

ART 246 Art in the Age of Rembrandt (M1) (F-1)

4 sem. hrs.

Concentrates on European painting and sculpture during the seventeenth century with emphasis on the art of the Netherlands. Considers careers of significant women artists, the popularity of landscape and portraiture, and changes in the commissioning and selling of art. Includes visits to works by Rubens, Rembrandt, Steen, Van Dyck, and others in the collections of the Museum of Fine Arts and the Gardner Museum. Hanni.

ART 247 Art in the Age of Leonardo da Vinci and Michelangelo (M1) (S-1)

4 sem. hrs.

Introduces the Italian Renaissance in the context of historical, social, and religious developments, including the changing role of the artist in society, patronage, workshop systems and their effect on women artists, and humanism. Examines the careers of Leonardo da Vinci, Michelangelo, Raphael, Botticelli, and Donatello and views the works from this period at the Museum of Fine Arts and the Gardner Museum. Hanni.

ART 248 Women and Art (M1) (F-2)

4 sem. hrs.

Surveys paintings, sculpture, and architecture by women artists from medieval times to the present; analyzes the representations of women in the visual

arts; and introduces theoretical issues related to feminist theory and the place of women in an expanding canon. Examines the contributions of artists such as Georgia O'Keeffe, Eva Hesse, Lee Krasner, and Cindy Sherman. Cohen.

ART 249 History of Photography (M1) (S-1)

4 sem. hrs.

Surveys the history of photography, covering major developments from the 1830s to the present. Studies the medium in a broad cultural framework with concentration on images and ideas and the cross-influence between photography and painting. Covers developments in art photography, documentary, and photojournalism. Hanni.

ART 251 African Art: 3000 BC to the Present (M1) (F-2)

4 sem. hrs.

Introduces African art from 3000 BC through the present, including Egyptian, Ashanti, Benin, Dogon, Bambara, Ife, and Ethiopian art, as well as art from other African cultures. Includes guest speakers (artists, historians, curators, etc.) and visits to museums. Chandler.

ART 252 Arts of the Far East: China and Japan (M1) (S-1,2)

4 sem. hrs.

Introduces the cultures of Japan and China through a study of painting, sculpture, and architecture. Considers stylistic developments and regional and historical characteristics in the context of the social, religious, and political history of these countries. Makes use of the superb Asian collection at the Museum of Fine Arts for an important opportunity to study firsthand a wide variety of Asian art. Staff.

ART 254 Contemporary Art (F-1)

4 sem. hrs.

Examines art from 1950 to the present with emphasis on the changing nature of the art object, role of the artist, and audience for art in the second half of the twentieth century. Emphasizes primarily, but not exclusively, American art with attention to emerging awareness of feminism, multiculturalism, and postmodern critical influences. Cohen.

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

ART 255 African American Art (M1) (S-1,2)

4 sem. hrs.

Surveys the history of African American art, with a strong emphasis on the contributions of African people to American culture, including special attention to the role of African people in developing world art. Includes tours of museums, galleries, artists' studios, and other institutions involved in the arts. Chandler.

ART 343 Special Topics in Art History (S-2)

4 sem. hrs.

Provides in-depth examination of a geographical area, time period, or theme. Uses a seminar format to equip students with greater facility in visual analysis, art historical methodologies, bibliographic study, individual research, and critical evaluation. Staff.

ART 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs.

Staff.

ART 350 Independent Study (F-1,2; S-1,2)

4 sem. hrs.

Staff.

ART/MUS 370 Internship in Art or Music

4 sem. hrs

Offers students "hands-on" experience in an arts organization such as a gallery, museum, music program, concert hall, or arts nonprofit. Internship sites based on interest and learning goals selected in consultation with adviser. Staff.

ART 390 Internship and Seminar: Arts in the Community (S-1,2)

8 sem. hrs.

Provides an integrated seminar and internship experience for students in arts administration designed to combine academic and experiential learning in a professional context. Includes internships in museums, galleries, or concert halls; musical organizations; or other institutions involved in the arts. Uses reading and writing assignments to explore issues related to public policy, funding, philanthropy, and the management of nonprofit arts organizations. Cohen.

MUSIC

Music has never been created in a vacuum. By its very nature, music absorbs prevailing musical, social, and expressive influences from many diverse cultures, thereby becoming truly international in spirit. Courses in music are designed as cultural enrichment for students whose principal interests are in other disciplines and for students considering a major in music. Music courses develop the student's ability to listen intelligently to a wide spectrum of music from many traditions. The introductory courses present a general appreciation of music by exploring traditional Western music as well as the music of non-Western cultures. Such experience is extremely beneficial to a liberal arts education and will enhance the student's creative work and performance in the humanities, sciences, and other professional areas. It also provides an excellent background for more specialized offerings.

There is no strict sequence in which music courses must be taken; however, the introductory courses (MUS 110, 120, or 121) are normally taken first.

Students who wish to take MUS 349 Directed Study at the New England Conservatory are required to take MUS 110, MUS 111, MUS 120, or MUS 121 before or at the same time as their first semester of applied music. Depending upon the student's musical background and with the permission of the instructor, it is possible to fulfill the course requirement for directed study with any Simmons music history or theory course.

A student's proficiency with any instrument or voice should be at an intermediate level or above. Therefore, a consultation with the music faculty is necessary before registration can be completed.

The department welcomes students wishing to develop joint majors with other departments; such students should consult with the music faculty about ways to integrate their interests.

Majors in Music

Majors offered in music include arts administration, applied music (performance), and music history and literature. The study of music can

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

lead to careers in a wide variety of fields, including teaching, performance, arts administration, music editing and publishing, recording, programming for radio and television broadcasts, etc. In many of these areas, the major in music would be enriched if combined with a major in another area, such as English, communications, management, or history.

Requirements . Students are required to complete thirty-two semester hours, distributed as follows:

Applied Music Major

- Four applied music courses,
- One course in theory or theoretical studies,
- One course in music history and literature, and
- Two electives chosen from music history or theory courses, depending upon interest.

Music History and Literature Major

- Four music history and literature courses,
- One course in theory or theoretical studies,
- One applied music course, and
- Two electives chosen from music history, theory, or applied studies, depending upon interest.

Interdepartmental Major and Minor in Arts Administration

The Department of Art and Music offers an interdepartmental major in arts administration with an emphasis in music. Information concerning this major begins on page 55. A minor in arts administration is also offered. See page 57.

Minor in Music

A music minor consists of four music history/theory courses (two at the 200 level) and one elective in music history, theory, or performance.

Other Programs

The New England Conservatory

Performance studies and theoretical subjects regularly offered at the New England

Conservatory may be elected for credit by qualified students.

Under the provisions of an interinstitutional agreement between the New England Conservatory and Simmons College, duly enrolled students at Simmons College may elect to include in their programs for full credit certain courses normally offered by the conservatory, subject to certain specified conditions, the details of which should be obtained from the registrar's office. A Simmons student who wishes to pursue a course at the conservatory must be recommended by the music faculty to the registrar. The student will then be referred to the New England Conservatory, which reserves the right to determine whether prerequisites for the course in question have been met and whether the student is fully qualified to pursue the course elected.

The Simmons Chorus

Richard Bunbury, director

The Simmons Chorus is a twenty- to thirty-voice women's chorus open to all women in the Simmons community, including undergraduate, graduate, and continuing education students, as well as faculty and staff. Auditions are held in September and January, and rehearsals take place twice weekly.

The chorus prepares two programs each year, performing at least one major concert at the end of each semester. The repertoire includes classical music written for women's voices from the Renaissance to the twentieth century. Some choral singing experience is helpful but not necessary.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

COURSES

MUS 110 Music Fundamentals I (F-1)

4 sem. hrs.

Introduces the language of music in non-western and western traditions. Discusses musical notation and terminology, tonal melodic singing and hearing, meter, rhythmic practice, and beginning concepts of harmony. Provides a beneficial background for other music courses. Slowik.

MUS 111 Music Fundamentals II (F-2)

4 sem. hrs.

Discusses the music of numerous cultures and stylistic periods and their function within various societies. Introduces examples of non-traditional notation leading to discussions and analysis of diverse compositions. Requires a basic understanding of music notation and familiarity with the keyboard. Reviews and strengthens concepts from MUS 110. *Note: MUS 110 and 111 are designed in sequence but may be taken separately.* Slowik.

MUS 120 Introduction to Music: The Middle Ages to Early Romanticism (M1) (F-1,2)

4 sem. hrs.

Surveys the multicultural trends and innovations that occurred in international music from the Middle Ages to early Romanticism. Emphasizes listening to and understanding a wide variety of music. Topics include Hildegard of Bingen; cathedral composers of France, Italy, and Germany; Bach; Handel; Mozart; Beethoven; and others. Slowik.

MUS 121 Introduction to Music: Early Romanticism to the Present (M1) (S-1,2)

4 sem. hrs.

Surveys multicultural trends and innovations that occurred in international music from early Romanticism to contemporary music. Emphasizes listening to and understanding a wide variety of music. Topics include the influence of non-western cultures, such as African and Asiatic, on international music; works of women composers; and ragtime, jazz, and musical theater. Slowik.

[MUS 125 The Symphony and Symphonic Music (M1)

4 sem. hrs. Not offered in 2002-2004.]

Enhances the listener's appreciation of symphonic music: symphonic trends from pre-classic to early twentieth century, development of orchestral instruments and symphonic forms, and historical and biographical information about each composition and composer. Integrates live concerts by the Boston Symphony Orchestra in Symphony Hall and by the New England Philharmonic. Slowik.

MUS 130 (STC) Music in Austria: The Imperial Legacy (M1) (S-2)

4 sem. hrs.

Examines the works of Haydn, Mozart, and Beethoven through visits and concerts in eighteenth century houses, churches, and palaces where Mozart lived and worked. A trip to Vienna, home to these great composers, offers an opportunity to experience the energy of a city that has been a musical and political capital for centuries. Day trips include the lakes region, the Austrian Alps, and museums and historic sites of the area. Slowik.

MUS 141 Mozart: The Man and His Music (M1) (U-1)

4 sem. hrs.

Focuses on Mozart's life and music primarily by studying his compositions. Develops an understanding of the structure of the music as well as Mozart's relationship with eighteenth-century Vienna. Discusses the effect of the Enlightenment upon the aristocracy, the church, and the musician. Requires no previous background in music. Slowik.

MUS 165 Music in Film (M1) (S-2)

4 sem. hrs.

Introduces the unique art of music for film. Screens films representing various eras and cultures and explores the film score. Presents genres including adventure flicks, dramas, film musicals, science fiction, and animated films. Studies music by the greatest film composers, including Max Steiner, Bernard Herrmann, John Williams, and others. Slowik.

[MUS 222 Music in America (M1)

4 sem. hrs. Not offered in 2002-2004.]

Introduces America's multicultural musical tradition, including Native American, African American, and Hispanic contributions, with consideration of related material such as painting, sculpture, architecture, dance, and literature. Gives special attention to work songs, jazz, blues, ragtime, concert repertoire, and musical theater and their influence upon European cultures. Slowik.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

[MUS 232 Bach to Beethoven: Music in the 18th Century (M1)

4 sem. hrs. Not offered in 2002-2004.]

Surveys music and related disciplines in the eighteenth century. Discusses great changes in society, contact with non-western countries, and the musician's place within society. Topics include Bach and Handel, E. Jacquet de la Guerre, Haydn and Mozart, American and French revolutions, Voltaire, Jefferson, and others. Slowik.

MUS 234 Music of the Romantic Tradition (M1) (S-1)

4 sem. hrs.

Studies nineteenth-century musicians, such as Debussy, Puccini, and Rimsky-Korsakov, who created music that was international and multicultural and influenced by Asiatic and Indonesian cultures, such as Japan and Bali. Introduces diverse topics, including art songs, fascination with the macabre, the "romantic" artist, and women composers—Clara Schuman, Fanny Mendelssohn-Hensel, and America's first well-known female composer, Amy Beach. Slowik.

MUS 239 Paris in the Modern Age (M1) (F-2)

4 sem. hrs.

Studies the highly diversified gathering of artists, writers, and musicians in Paris at the dawn of the twentieth century. Examines the music, art, and literature of these fascinating people. Topics include Debussy and impressionism, Stravinsky and Picasso, influences of African culture, Paris International Exhibition, Gertrude Stein, Proust, and others. Slowik.

MUS 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs.

Private lessons with faculty of the New England Conservatory. Requires department approval. Staff.

MUS 350 Independent Study (F-1,2; S-1,2)

4 sem. hrs.

Individualized projects at an advanced level. Slowik.

MUS/ART 370 Internship (F-1,2; S-1,2)

4 sem. hrs.

See description on page 62.

Department of Biology

Jane Lopilato, ~~Chair and~~ **Associate Professor**

D. Bruce Gray, ~~Associate~~ **Professor**

Mary H. Owen, ~~Associate~~ **Professor**

Thomas Montagno, ~~Assistant~~ **Professor**

Randi Lite, **Instructor**

Arthur Skura, **Laboratory Supervisor and Lecturer**

Janet McDonough, **Lecturer**

Victoria Galloway, ~~Administrative~~ **Assistant**

Tracy Machcinski, **Laboratory Assistant**

The department's offerings are designed to help students develop an understanding of the scope, the methods of inquiry, and the specialties of biology, as well as an appreciation of modern biological trends. Undergraduate preparation in biology may lead to career opportunities in government, university, hospital, and commercial laboratories in areas such as animal and plant physiology, developmental biology, molecular biology, biochemistry, microbiology, immunology, ecology, and biotechnology. The curriculum also prepares students for graduate study in biology and in such areas as allied health careers, medicine, dentistry, veterinary science, and genetic engineering. Preparation in biology can lead to training in medical technology.

Cooperation with other departments in the College provides opportunities for joint programs, such as majors in biochemistry, psychobiology, and environmental science. Certification for teaching biology at the middle school and secondary school levels is possible by enrollment in the Department of Education and Human Services.

Major in Biology

For students desiring a broad education in the life sciences, ranging from the molecular and cellular level to that of populations and ecosystems, this major provides maximum flexibility in preparation for careers in biology, biotechnology, and related fields; it also serves as excellent preparation for graduate and professional schools.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Requirements: Students planning a program in biology satisfy the core requirements by taking the following courses:

Year 1:

BIOL 113 General Biology
BIOL 218 Principles of Zoology

Year 2:

BIOL 222 Animal Physiology
BIOL 225 Cell Biology

Year 3:

BIOL 336 Genetics

To complete the minimum requirements, students must take three additional courses in biology, at least two of which must be numbered 300 or higher.

In the senior year, students must satisfy their independent study requirement by taking two semesters of BIOL 350 or BIOL 370.

Prerequisites: Students are required to take CHEM 111 or 113, 114, and 225 as well as MATH 120 or its equivalent. Students interested in medical or dental school or in pursuing graduate study in certain areas of biology should plan to include CHEM 226, MATH 121, and a year of physics.

Students interested in careers in dentistry, medicine, optometry, podiatry, veterinary medicine, and the allied health professions should consult the health professions adviser, Mary H. Owen, associate professor of biology.

Education Track

This track is recommended for students majoring in elementary or middle school education who desire a general science background with an emphasis in biology. It is not recommended for students planning on graduate school or research careers.

Requirements: Students taking the education track should enroll in BIOL 113 General Biology and CHEM 111 Introductory Chemistry: Inorganic in their first year. In subsequent years, students should enroll in four biology courses

numbered above 200, one of which should be either BIOL 245 Principles of Ecology or BIOL 333 Marine Biology. Students must also take PHYS/BIOL 103 and any two of the following:

CHEM 112 Introductory Chemistry:
 Organic
NUTR 110 Sociocultural Implications of
 Nutrition
PHYS 110 Introductory Physics

The independent learning requirement can be satisfied by successfully completing EDUC 382 Provisional Practicum: Elementary School (Grades 1-6) or two semesters of BIOL 350 or BIOL 370.

Joint Major in Biochemistry

The major in biochemistry is jointly administered by the Departments of Biology and Chemistry and is designed for students with a strong interest in both chemistry and biology. The rapidly growing field of biochemistry involves the application of chemical concepts and techniques to the understanding of life processes in agriculture, medical research, biotechnology, nutritional research, and other areas at the interface of chemistry and biology. Students majoring in biochemistry will be well equipped for professions in research and industry, as well as the pursuit of graduate study in biochemistry, medicine, genetics, and related fields.

Requirements: The program consists of a core of chemistry and biology courses beginning in the first year and continuing for the first three years, a choice of two 300-level elective courses in chemistry and/or biology, and a one-year independent study project culminating in a thesis. In addition, there are six prerequisite courses in biology, chemistry, calculus, and physics. See pages 72-73 for the complete biochemistry curriculum.

Joint Major in Environmental Science

Environmental science is a joint major offered by the Departments of Biology and Chemistry. This major recognizes the importance of environmental problems in the contemporary world and the expansion of career opportunities in this area.

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

Environmental careers fall into three broad categories: environmental protection, natural resource management, and planning/communication. With regard to career preparation, the Simmons major is most closely associated with the environmental protection area. This field depends particularly on the application of science to problems such as air quality, water quality, solid waste, hazardous waste, and habitat destruction. Persons pursuing careers in environmental protection need strong preparation in the basic sciences combined with the broad outlook that can distinguish environmentally responsible development from narrowly focused projects that ignore any environmental impact.

The environmental science major incorporates strong preparation in basic sciences (biology, chemistry, physics, and statistics), four science courses with specific emphasis on environmental problems, and non-science courses that explore the relationships between environmental protection and economics and government. An internship in an environmental science laboratory or with an environmental protection agency/organization is encouraged. For a detailed description of the environmental science major and curriculum, please refer to pages 73-74.

Joint Major in Psychobiology

Students of both biology and psychology may wish to consider the joint major in psychobiology administered by the two departments. Psychobiology draws from subject matter in the physical sciences, social sciences, and mathematics as well as the parent disciplines of biology and psychology. It serves as an excellent preparation for a career in psychobiology and graduate work in either of the parent disciplines.

Requirements: A core sequence of courses equally balanced between biology and psychology and electives designed to tailor the major to the student's particular interest are required for completion of the psychobiology major. The complete curriculum of required, elective, and prerequisite courses is listed on pages 191-192.

Minor in Biology

A minor in biology requires BIOL 113 General Biology and four additional courses in biology, all of which must be numbered 200 or above. Students should contact the department chairperson to discuss course selection.

Double Degree Program in Biology and Physician Assistant Studies

Under the provisions of an interinstitutional agreement with the Massachusetts College of Pharmacy and Health Sciences (MCPHS), Simmons College offers a six-year double degree program for Simmons students leading to the Bachelor of Science degree in biology from Simmons and the Master of Physician Assistant Studies from MCPHS. MCPHS, a member of the Colleges of the Fenway consortium, is located on Longwood Avenue, one block from Simmons, and is accredited by the New England Association of Schools and Colleges and the American Council on Pharmaceutical Education. For further information about MCPHS, please see the description under the double degree program in chemistry and pharmacy on pages 75-76. Students interested in the program should contact the program adviser, Mary H. Owen, in the biology department.

Physician assistants play an important role in the health care community by providing health care services to diverse patient populations with a range of acute and chronic medical and surgical conditions. Physician assistants have excellent employment prospects in both urban academic health centers and remote rural communities. Simmons students who complete this program will have extensive background and training in biology and chemistry, basic medical science, clinical disciplines, and discipline-specific problem-solving skills. The physician assistant program at MCPHS is fully accredited, and students who successfully complete the program are eligible to sit for the national certifying examination for physician assistants.

The curriculum for the program includes four full years at Simmons and two years of profes-

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

sional training (coursework and clinical clerkships) at MCPHS. The required undergraduate coursework is listed below by academic year. Students accepted into the program must maintain a minimum cumulative science GPA of 2.80 in the undergraduate program and 3.00 in the graduate component. Students must also take the Graduate Record Exam in their third year and earn an overall score of 1500 (combined score of 1000 or greater on the verbal and quantitative sections). Students must obtain experience working with patients in the clinical environment. They must also undergo an interview process in their sophomore and junior years with the Simmons College program adviser and director of the physician assistant program at MCPHS.

To apply for admission to the program, students should contact the undergraduate admissions office. Internal transfers are accepted based upon available positions. Students accepted to the program should plan to meet with the program adviser in their first year.

Requirements for the undergraduate biology major and program requirement (first four years at Simmons):

Year One

MCC 101	Culture Matters I
BIOL 113	General Biology (M4)
CHEM 113 or 111	Introductory Chemistry
Language (101)	
MCC 102	Culture Matters II
BIOL 221	Microbiology (200-level Biology elective)
CHEM 114	Organic Chemistry I
Language (102)	

Year Two

PSYC 101	Introduction to Psychology (M6)
CHEM 225	Organic Chemistry II
MATH 120	Calculus I (M3)
Language (201 or 210; 210-M2)	
BIOL 225	Cell Biology

CHEM 226	Quantitative Analysis
MATH 121	Calculus II
SOCI 101	Principles of Sociology (M5)

Year Three

BIOL 336	Genetics
CHEM 347	Biochemistry (300-level elective)
BIOL 231	Anatomy and Physiology I
SOCI 242	Death and Dying
NUTR 334	Pathophysiology (300-level elective)
SOCI 247	Orientation to Health Professions
BIOL 232	Anatomy and Physiology II
PSYC 231	Abnormal Behavior

Year Four

MATH 238	Statistics
PHYS 112	Physics I
BIOL 350/370	Independent Study/Internship Elective (M1/M2)
MCPHS Gross Anatomy	(cross-register; 300- level elective)
	Elective (M1/M2)
BIOL 350/370	Independent Study/Internship
PHIL 131	Biomedical Ethics (M6)

Years Five and Six at MCPHS

COURSES

BIOL 102 Biology of Human Development (M4) (F-1)
4 sem. hrs. Not a prerequisite for further courses in the department.
Explores human development across the life span and the issues and processes that recur throughout that span. Examines human development from the embryonic period through aging and provides a practical understanding of individual growth and change. Owen.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

BIOL/PHY S 103 Great Discoveries in Science

(M4) (S-1)

4 sem. hrs.

Focuses on breakthrough ideas concerning the universal laws of nature, the origin and composition of the universe, the nature of matter, and the origin and evolution of life. Encourages learning through inquiry and cooperative strategies to foster an appreciation of the processes, accomplishments, and limitations of science. Weekly laboratory meetings support the classroom learning. Goldberg, Montagno.

BIOL 109 Biology of Women (M4) (F-2)

4 sem. hrs. Not a prerequisite for further courses in the department.

Considers biological factors that contribute to sex identification and the role of women in contemporary society. Emphasizes the genetic, developmental, anatomical, and physiological differences between the sexes and the behavioral consequences of those differences. Includes lecture and laboratory sessions. McDonough.

BIOL 113 General Biology (M4) (F-1,2)

4 sem. hrs.

Introduces basic principles of biology, including cell structure and function, biochemistry, and metabolism; Mendelian and molecular genetics; and discussion of the theory of evolution. Includes lecture and laboratory sessions. Gray.

BIOL 218 Principles of Zoology (S-1,2)

4 sem. hrs. Prereq.: BIOL 113, or consent of instructor.

Studies animal form and function, origin of animal diversity, and the strategies that animals use to thrive in diverse environments. Considers taxonomy and phylogeny of major animal groups. Montagno, Owen.

BIOL 221 Microbiology (S-1,2)

4 sem. hrs. Prereq.: One semester each of college biology and chemistry; concurrent enrollment in CHEM 112 or CHEM 114.

Introduces the biology of microorganisms: bacteria, viruses, and fungi. Stresses control of microbial populations, systematic study, and use of quantitative methods. Includes lecture and laboratory sessions. Staff.

BIOL 222 Animal Physiology (F-1,2)

4 sem. hrs. Prereq.: BIOL 113 and BIOL 218.

Studies basic organ system function in vertebrates and selected invertebrates. Uses living and preserved animals as well as computer simulation to reveal underlying principles of integration of cardiovascular, respiratory, excretory, digestive, reproductive, nervous, and endocrine function in animals. Includes lecture and laboratory sessions. Gray, Owen.

BIOL 225 Cell Biology (S-1,2)

4 sem. hrs. Prereq.: One year each of college biology and chemistry or consent of the instructor.

Presents a thorough study of the cell, including structure, function, cell diversity, and methods of analysis. Examines major biochemical pathways of the cell in relation to particular organelles. Laboratory exercises introduce a wide range of techniques used by cell biologists. Lopilato, Owen.

BIOL 231 Anatomy and Physiology I (F1,2)

4 sem. hrs. Prereq.: One year each of college biology and chemistry.

Presents an integrated approach to the fundamental facts and concepts of human anatomy and physiology. Emphasizes the cellular basis of membrane excitability and hormone action, neurobiology, and musculoskeletal system and motor control. Laboratory includes histology, gross anatomy, and physiological experiments. Lite.

BIOL 232 Anatomy and Physiology II (S-1,2)

4 sem. hrs. Prereq.: One year each of college biology and chemistry; BIOL 231 recommended.

Introduces structural relationships and functional integration of major systems of the human body, with emphasis on reproductive, respiratory, renal, gastrointestinal, cardiovascular, and defense systems. Laboratory includes histology, gross anatomy, and physiological experiments. Lite.

BIOL 245 Principles of Ecology (F-1)

4 sem. hrs. Prereq.: One year of college biology or consent of the instructor.

Examines interrelations of plants and animals and the environment. Covers biological adaptations and biogeochemical cycles. Analyzes geographical, chemical, and biological aspects of the environment and their application to conservation, with an emphasis

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

on New England. Includes fieldwork in mountain, marsh, bog, and rocky shore ecosystems. Montagnò.

BIOL 331 Immunobiology (S-1)

4 sem. hrs. Prereq.: BIOL 225 and CHEM 225 or consent of the instructor.

Considers the basic principles of immunology with applications of immunologic theory and techniques to microbiology, biochemistry, genetics, developmental biology, and evolution. Canfield.

BIOL 332 Exercise Physiology (S-2)

4 sem. hrs. Prereq.: BIOL 222 or BIOL 231.

Studies the physiological and adaptive responses of the human body to acute and chronic exercise stress. Examines how exercise affects major organ systems across the spectrum of healthy and unhealthy populations. Laboratory uses a variety of exercise equipment to apply physiological concepts to exercise testing, prescription, and training. Lite.

BIOL 333 Marine Biology (S-1)

4 sem. hrs. Prereq.: BIOL 218 and one year of college chemistry.

Introduces the marine environment and its diverse communities, focusing on the classification and adaptations of marine organisms. Studies geological, physical, and chemical aspects of the environment. Includes laboratory sessions and field trips. Staff.

BIOL 334 Neurobiology (F-2)

4 sem. hrs. Prereq.: BIOL 225 or BIOL 231 or consent of the instructor.

Introduces human brain function using comparative and evolutionary concepts with emphasis on molecular, cellular, and neurophysiological techniques. Uses neuropathologies and disorders to illustrate basic concepts. Includes informal critiques and mock grant proposals. Laboratory introduces students to neuroanatomy and basic techniques in neuroscience research. Gray.

BIOL 335 Developmental Biology (S-2)

4 sem. hrs. Prereq.: BIOL 225, BIOL 336, and CHEM 225.

Studies the morphological changes that occur in the development of organisms and the molecular events that underlie these processes. Laboratory sessions explore the development of many organisms, including vertebrates, invertebrates, and plants. Owen.

BIOL 336 Genetics (F-1,2)

4 sem. hrs. Prereq.: CHEM 225 and BIOL 225 or consent of the instructor.

Studies the principles of classical and molecular genetics in both eukaryotic and prokaryotic genetics systems. Emphasizes problem-solving to illustrate techniques of genetic analysis. Includes lecture and laboratory sessions. Lopilato.

BIOL 337 Molecular Biology (S-1)

4 sem. hrs. Prereq.: CHEM 225 and BIOL 225 or consent of the instructor.

Examines gene structure and function; regulation of DNA, RNA, and protein synthesis; the control of gene expression; and the use of recombinant DNA technology as an investigative tool. Lopilato.

BIOL 339 Special Topics in Biology (S-2)

4 sem. hrs. Prereq.: Consent of the instructor.

An intensive study of a specific topic in biology. Topics vary from year to year in response to faculty expertise, student interest, and current developments in biology. Staff.

BIOL 340 Plant Physiology (F-2)

4 sem. hrs. Prereq.: One year each of college biology and chemistry.

Introduces the physiology, biochemistry, and control of growth and development in higher plants. Topics include photosynthesis, hormonal regulation of development, transport mechanisms, plant tissue culture, nitrogen fixation, and plant pathogen relations. Includes lecture and laboratory sessions. Montagnò.

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

BIOL 342 Topics in Behavioral Biology (F-1)
4 sem. hrs. Prereq.: One year of college biology or consent of the instructor.

Studies invertebrate and non-human vertebrate behavior, including such topics as anatomical and physiological bases of behavior, effects of stress on behavior, genetics and ontogeny of behavior, courtship and aggression, communication, and migration. Lecture and laboratory sessions provide opportunities for extended experiments. Gray.

BIOL 349 Directed Study (F-1,2; S-1,2)
4 sem. hrs. Prereq.: Consent of the instructor. Staff.

BIOL 350 Independent Laboratory Research (F-1,2; S-1,2)
4-8 sem. hrs. Prereq.: Senior standing, consent of the department.

Usually taken for two semesters (eight semester hours) but may be elected for one semester (four semester hours) at the discretion of the faculty sponsor. Staff.

BIOL 370 Internship (F-1,2; S-1,2)
4-8 sem. hrs. Prereq.: Senior standing, consent of the department.

Provides a supervised professional experience off campus. Potential sites include clinical settings, government agencies, conservation groups, and zoos. Placement is students' responsibility, with the support of the Career Education Center and the approval of the department.

Department of Chemistry

Leonard J. Soltzberg, **Chair and Hazel Dick Leonard Professor**

Michael D. Kaplan, **Associate Professor**

*Nancy E. Lee, **Associate Professor**

*Jennifer A. Canfield, **Assistant Professor**

Virginia B. Brown, **Lecturer**

Nora Friel, **Stockroom Supervisor**

Kathleen Mathews, **Staff Assistant**

**On leave fall semester 2002.*

Chemistry occupies a central place in the study of matter and life, including the abstract theoretical modeling of materials as well as the concrete molecular foundations of living systems.

Chemistry careers span the entire range of contemporary technologies. BS graduates in chemistry work in laboratories developing pharmaceuticals, cosmetics, energy resources, advanced materials for specific applications, solutions to environmental problems, and so on. A chemistry bachelor's degree is also excellent preparation for professional schools of medicine or dentistry, especially with the increasing dependence of medical research and practice on knowledge of living systems at the molecular level. With the MS or PhD in chemistry, a scientist can take responsibility for planning research and supervising laboratories. Excellent career opportunities are found in private industry, in government laboratories, and in college and university chemistry and biochemistry departments.

In addition to our chemistry major approved by the American Chemical Society, Simmons offers a number of special programs:

- major in biochemistry
- major in environmental science
- double degree in chemistry and pharmacy, in collaboration with Massachusetts College of Pharmacy and Health Sciences
- joint major in chemistry and management
- MAT in teaching chemistry fast-track
- MS in science librarianship fast-track

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

The MAT fast-track program permits students to decrease the time required to obtain a master's degree by starting graduate courses during the undergraduate years. A science major may pursue this program to obtain secondary school teaching credentials. The program in library and information science will appeal to students interested in the application of new technology to science information retrieval.

Major in Chemistry

First Year

CHEM 113	Principles of Chemistry
CHEM 114	Organic Chemistry I
MATH 120, 121	Calculus I, II

Sophomore Year

CHEM 225	Organic Chemistry II
CHEM 226	Quantitative Analysis
PHYS 112, 113	Fundamentals of Physics I, II

Junior Year

CHEM 331	Thermodynamics and Kinetics
CHEM 332	Quantum Mechanics and Molecular Structure
MATH 220	Multivariable Calculus
Elective in chemistry	

Senior Year

CHEM 355	Independent Study with Thesis (eight semester hours)
CHEM 390	Chemistry Seminar (required; no credit)
Electives (choose two): 341, 343, 344, 346, 347, 348	

Facilities and Prerequisites

After declaring a major in chemistry, students select one of the individual laboratory bench-study spaces in S430, where they carry out much of the rest of their work in chemistry. Grants to Simmons have provided the department with instrumentation beyond the scope usually available at undergraduate colleges.

Students considering a major in chemistry should take CHEM 113 and 114 during their first year. In some cases, students with little or no previous high school background may be advised to take CHEM 111 instead of 113. MATH 101 or 102 will be recommended by advisers for students in chemistry who may need to review basic mathematical concepts. By the middle of the junior year, students should have taken MATH 220 and PHYS 112 and 113.

Graduate School Preparation

The American Chemical Society (ACS) suggests a set of standards that it believes will prepare students for graduate study. To meet these standards, the student's program must include CHEM 341, CHEM 348, and either CHEM 346 or CHEM 347. Certification that the student's curricular program has met the ACS standards is not required for any career or graduate study; the standards are only a guide in planning a program that will make graduate study easier.

Joint Major in Biochemistry

The major in biochemistry is jointly administered by the departments of biology and chemistry. The rapidly growing field of biochemistry involves the application of biological and chemical concepts and techniques to the understanding of life processes such as the determination of hereditary traits, utilization of energy, propagation of nerve signals, and the molecular basis of physiological and pharmacological phenomena. Biochemists are involved in agriculture, medical research, biotechnology, nutritional research, and other areas at the interface of chemistry and biology. Students majoring in biochemistry will be well equipped for professions in research and industry, as well as the pursuit of graduate study in biochemistry, medicine, genetics, and other related fields.

The program consists of a core of chemistry and biology courses beginning in the first year and continuing for the first three years, a choice of two 300-level elective courses in chemistry and/or biology, and a one-year independent study project culminating in a thesis. In addition,

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

there are six prerequisite courses in biology, chemistry, calculus, and physics. The following list of requirements includes both the core and the prerequisite courses. A student may find it convenient to take MATH 120 and/or MATH 121 during the summer. The advanced biochemistry lab, CHEM 345, provides an opportunity to learn more advanced techniques in biotechnology. It does not fulfill any of the elective requirements.

Graduate School Preparation

To meet the ACS standards described above under chemistry major, biochemistry majors must include CHEM 341 and CHEM 348 in their program.

Requirements

First Year

BIOL 113	General Biology
BIOL 221	Microbiology
CHEM 111	Introductory Chemistry: Inorganic
or CHEM 113	Principles of Chemistry
CHEM 114	Organic Chemistry I
MATH 120, 121	Calculus I, II

Sophomore Year

BIOL 225	Cell Biology
CHEM 225	Organic Chemistry II
CHEM 226	Quantitative Analysis
PHYS 112, 113	Fundamentals of Physics

Junior Year

BIOL 337	Molecular Biology
CHEM 331	Thermodynamics and Kinetics
CHEM 347	Biochemistry
300-level elective in biology or chemistry	

Senior Year

300-level elective in chemistry or biology other than CHEM 345

Biochemistry majors do their independent study research either in chemistry (CHEM 355) or in biology (BIOL 350). If registered for

CHEM 355, biochemistry majors must also participate in the classroom component of BIOL 350.

Biochemistry majors also register for CHEM 390 Chemistry Seminar.

Joint Major in Environmental Science

Environmental science is a joint major offered by the Departments of Chemistry and Biology. This major recognizes the importance of environmental problems in the contemporary world and the expansion of career opportunities in this area.

Environmental careers fall into three broad categories: environmental protection, natural resource management, and planning/communication. The Simmons environmental science major is most closely associated with the environmental protection area. This field depends particularly on the application of science to problems such as air quality, water quality, solid waste, hazardous waste, and habitat destruction. Persons pursuing careers in environmental protection need strong preparation in the basic sciences combined with the broad outlook that distinguishes environmentally responsible development from narrowly focused projects that ignore environmental impact.

The environmental science major incorporates strong preparation in basic sciences (biology, chemistry, physics, statistics); four science courses with specific emphasis on environmental problems (BIOL 245, BIOL 333, CHEM 327, CHEM 550); two economics courses, which explore the relationships between market forces and industrial behavior; and the option of an internship in an environmental science laboratory. A formal presentation is required and can be fulfilled by CHEM 390 Chemistry Seminar or an equivalent experience in a 300-level biology course.

Requirements:

First Year

BIOL 113	General Biology
BIOL 218	Principles of Zoology
CHEM 111	Introductory Chemistry: Inorganic
or CHEM 113	Principles of Chemistry

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

CHEM 112	Organic Chemistry
Sophomore Year	
BIOL 245	Principles of Ecology
CHEM 226	Quantitative Analysis
MATH 118	Introductory Statistics
or MATH 238	Applied Statistical Models
PHYS 110, 111	Introductory Physics

Junior Year

CHEM 327	Advanced Applications in Environmental Science
CHEM 550	Environmental Chemistry (taught at Wentworth Institute of Technology)
BIOL 340	Plant Physiology
ECON 100	Principles of Microeconomics

Senior Year

BIOL 333	Marine Biology
ECON 247	Environmental Economics
or ECON 239	Government Regulation of Industry
PHIL 129	Environmental Ethics
Independent learning/internship	

Some electives are offered in alternate years to afford student flexibility in scheduling.

Joint Major in Chemistry-Management

The chemistry-management joint major is designed for students who would like to apply their scientific interests to a business career. The major is appropriate for a variety of careers at the interface of the two disciplines, such as sales and marketing specialists for chemical and pharmaceutical companies, business officers in science-based industries or institutions, and scientific information liaisons (e.g., public relations, political advising, and lobbying).

The independent learning requirement is ordinarily fulfilled by MGMT 370 Internship (eight semester hours) in a project related to the management or financial aspects of science-related

organizations, such as science museums or hospital laboratories. These internships are identified by the Department of Chemistry, approved by both departments, and administered by the management program according to the normal procedures of MGMT 370.

In rare instances, the independent learning requirement may be fulfilled by CHEM 355 (eight semester hours) or by a non-science-related internship in MGMT 370.

First Year

CHEM 111	Introductory Chemistry: Inorganic
or CHEM 113	Principles of Chemistry
CHEM 114	Organic Chemistry I
MATH 120	Calculus I
MATH 121	Calculus II

Sophomore Year

CHEM 225	Organic Chemistry II
CHEM 226	Quantitative Analysis
PHYS 112	Fundamentals of Physics I
PHYS 113	Fundamentals of Physics II
ECON 100	Principles of Microeconomics
ECON 101	Principles of Macroeconomics

Junior Year

CHEM 331	Thermodynamics and Kinetics
or CHEM 332	Quantum Mechanics and Molecular Structure
MGMT 100	Introduction to Management
MGMT 110	Principles of Accounting
MGMT 234	Organizational Communication and Behavior
MATH 118	Introductory Statistics

Senior Year

MGMT 250	Principles of Marketing
or MGMT 260	Principles of Finance
Chemistry elective	
Internship/independent study	
CHEM 390	Chemistry Seminar

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Strongly recommended electives:
 MGMT 340 Strategic Management
 and the remaining course from MGMT 250 or
 MGMT 260.

Double Degree Program in Chemistry and Pharmacy

Under the provisions of an interinstitutional agreement with the Massachusetts College of Pharmacy and Health Sciences (MCPHS), Simmons College offers a seven-year dual major (double degree) program for Simmons students, leading to the BS degree in chemistry from Simmons and the PharmD degree from MCPHS. Interested students should consult the chair of the chemistry department.

Pharmacy is an integral part of the health care community and industry. The PharmD degree, followed by state licensing, leads to a variety of opportunities in community or hospital pharmacy and in research, development, and marketing with pharmaceutical and cosmetic companies. The dual degree program requires one year more to complete than a regular entry-level six-year PharmD but has somewhat more flexibility in career options, particularly for a student who becomes interested in research.

MCPHS, a member of the Colleges of the Fenway consortium, is located on Longwood Avenue, one block from Simmons and accredited by the New England Association of Schools and Colleges and the American Council on Pharmaceutical Education. It was organized as a private institution in 1823 to educate men and women in the profession of pharmacy. In addition to the professional PharmD degree, MCPHS offers undergraduate degrees in a number of health-related areas and research-oriented MS and PhD degrees in the pharmaceutical sciences.

The curriculum for the double degree consists of three full years at Simmons, a fourth year that includes eight semester hours of independent study at Simmons with the remainder of the course work at MCPHS, and an additional three years at MCPHS completing coursework and experiential education.

Students fulfill the degree requirements of both institutions; no degree is awarded until the entire program is complete. At that time, the student receives a PharmD degree from MCPHS and a BS degree in chemistry from Simmons.

Licensure in pharmacy in Massachusetts requires 1,500 hours of internship (practical pharmacy) plus a state board examination. One thousand hours of the internship are arranged by the student and are paid. The student usually begins the internship with summer or academic year appointments after transferring to MCPHS. The balance of the internship requirement is met by satisfactory completion of the experiential education during the seventh year. State licensing examinations are generally taken during the summer following graduation.

Students interested in the double degree should talk to the chair of the chemistry department as early as possible in their programs. Early contact is helpful both for advising for the proper prerequisite courses and for identifying the total number of potential double degree candidates.

Students apply for admission to MCPHS during their junior year at Simmons through MCPHS's normal transfer student admission process. Although MCPHS agrees to give qualified Simmons students preference, it is their right to determine final suitability for entry into the professional pharmacy program.

Requirements for the chemistry major:
 (First three years plus independent study)

Year One

BIOL 113	General Biology
BIOL 218	Principles of Zoology
CHEM 111	Introductory Chemistry: Inorganic
or CHEM 113	Principles of Chemistry
CHEM 114	Organic Chemistry I
MATH 120	Calculus I
MATH 121	Calculus II

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Year Two

BIOL 221	Microbiology
CHEM 225	Organic Chemistry II
CHEM 226	Quantitative Analysis
PHYS 112	Fundamentals of Physics I
PHYS 113	Fundamentals of Physics II
PSYC 101	Introduction to Psychology

Year Three

CHEM 331	Thermodynamics and Kinetics
CHEM 332	Quantum Mechanics and Molecular Structure
CHEM 347	Biochemistry
ECON 101	Principles of Macroeconomics
MATH 238 or MATH 118	Applied Statistical Models Introductory Statistics

Year Four

CHEM 355	Independent Study with Thesis
CHEM 390	Chemistry Seminar

A detailed description of the double degree program is available from the chemistry department office.

Minor in Chemistry

A minor in chemistry consists of two 100-level courses: (111 or 113 and 112 or 114); one or two 200-level courses; and an additional 300-level course.

Minors can be designed to meet the special interests of a variety of students. An environmental interest would be met by the CHEM 111 or 113, 112, 226, 327, and 550 (WIT) sequence; math students could elect CHEM 112, 113, 226, 332, and 344 or 348; biologists could easily obtain a chemistry minor by electing CHEM 111 or 113, 114, 225, 226, and 347.

Students in majors constructed from the offerings of two departments (biochemistry, environmental science) do not obtain a minor in either department. No more than one course in the minor should be taken pass/fail.

Minor in Physics of Materials

This minor is offered jointly by the Departments of Physics and Chemistry. Please see the description under physics.

Integrated BS/MAT or MS Programs

Integrated programs permit students to obtain bachelor's and master's degrees in less time than it would take to do the programs separately. Students begin the master's degree program during their junior and senior years. The integrated program in education, described under the Department of Education and Human Services on pages 118-119, helps to fulfill a great unmet need for qualified chemistry teachers at the high school level.

The integrated program in chemistry and library and information science leads to a BS in chemistry and a MS in library and information science. Information about this program can be obtained from the chemistry department or from the Graduate School of Library and Information Science. Biotechnology and other private sector and government research organizations actively seek science information specialists with this combination of qualifications.

Certificate in Chemical Health and Safety

The Colleges of the Fenway offers a program leading to a certificate in chemical health and safety. The program requires twenty hours of coursework in biology, physics, and chemistry including at least one semester of organic chemistry. One course from BIOL 345, CHEM 327, or CHEM 550 (WIT) is highly recommended. Beyond these, the course in chemical health and safety offered as a summer course at Wentworth Institute of Technology plus a two-hour seminar in safety procedures and a four-hour internship are required. Consult the chair of the chemistry department for more information.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

COURSES

[CHEM 107 Chemistry of Drugs and Drug Action (M4)

4 sem. hrs. Not offered in 2002-2004.]

Focuses on chemistry and biochemistry of drugs, including a historical perspective and modern methods of drug design. Introduces chemical principles using a topical approach. Topics may include over-the-counter drugs such as diet pills, non-drugs such as tobacco and alcohol, and legal and illegal drugs. Six hours per week, variable lecture/laboratory. For non-science students. Staff.

CHEM 109 Chemistry, Society, and the Environment (M4) (S-2)

4 sem. hrs.

Focuses on chemicals and chemical principles and their impact on our way of life. Topics include energy resources, environmental chemistry, chemistry in the arts, chemistry in the home, hazardous substances, and biotechnology. Six hours per week, variable lecture/laboratory. For non-science students. Staff.

CHEM 111 Introductory Chemistry: Inorganic (M4) (F-1,2)

4 sem. hrs.

Covers basic concepts with special reference to inorganic compounds, including chemical equations, the Periodic Table, chemical bonding, and equilibrium. Assumes no previous knowledge of the subject or sophisticated background in mathematics. Laboratory correlates with and amplifies the lecture material and presents fundamental laboratory techniques, including instrumental methods. Three lectures, one discussion period, and one laboratory per week. Staff.

CHEM 112 Introductory Chemistry: Organic (S-1,2)

4 sem. hrs. Prereq.: CHEM 111 or CHEM 113.

Covers nature of the covalent bond, structure of organic compounds, and their reactions and reaction mechanisms. Introduces structure and biochemical functions of compounds important to life. Three lectures, one discussion period, and one laboratory per week. For the concentrator in the paramedical or science-related field. Staff.

CHEM 113 Principles of Chemistry (M4) (F-1,2)

4 sem. hrs. Prereq.: A satisfactory score on the Simmons chemistry placement examination.

Provides a quantitative development of a few fundamental topics: connections between chemical behavior and molecular structure, with special reference to molecular modeling; dynamic chemical processes; and energy, entropy, and chemical equilibrium. Emphasizes applications of chemistry to real-world problems. Laboratory introduces quantitative techniques, including instrumental methods, for studying chemical systems. Three lectures, one discussion period, and one laboratory per week. Soltzberg.

CHEM 114 Organic Chemistry I (S-1,2)

4 sem. hrs. Prereq.: CHEM 111 or CHEM 113.

Covers fundamental concepts of atomic structure, hybridization, molecular orbitals, and structure of organic molecules. Surveys functional groups, classes of organic compounds, and their reactions. Provides in-depth mechanistic study of those reactions, involving energies, stereochemistry, equilibrium, and reaction rate theory. Three lectures, one discussion period, and one laboratory per week. Lee.

CHEM/PHYS 220 Materials Modeling (F-2)

2 sem. hrs.

See description on page 182.

CHEM 223 Introduction to Biochemistry (S-1,2)

4 sem. hrs. Prereq.: CHEM 114 or CHEM 112.

Covers chemical processes in living organisms, with special emphasis on human nutrition. Studies carbohydrates, lipids, proteins, and enzymes; their function in living systems; and their metabolic pathways and regulation. Three lectures per week. Canfield.

CHEM 225 Organic Chemistry II (F-1,2)

4 sem. hrs. Prereq.: CHEM 114 or CHEM 112 with consent of the instructor.

Extends CHEM 114 to consider additional classes of organic compounds and the more intimate relationship between structure and reactivity as expressed in mechanistic terms. Three lectures, one discussion period, and one laboratory per week. Lee.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

CHEM 226 Quantitative Analysis (S-1,2)

4 sem. hrs. Prereq.: CHEM 113 or CHEM 111 with consent of the instructor.

Presents theoretical principles and experimental practice of quantitative analysis. Topics include solubility, acid-base and redox equilibria and their application in potentiometric, gravimetric, titrimetric, and coulometric methods; spectrophotometry; ion-exchange and chromatographic separations; and analytical data evaluation and computer data reduction. Three lectures and approximately six hours of laboratory per week. Kaplan.

CHEM 327 Advanced Applications in Environmental Science (F-1)

4 sem. hrs. Prereq.: PHYS 110, PHYS 111, and BIOL 245.

A capstone course involving the application of a variety of analytic tools to environmental problems. Teaches dynamic systems modeling, advanced spreadsheet techniques, and other computer and laboratory methods. Application areas include the environmental impacts of energy production and consumption, population dynamics, and climate change. Includes a project and presentation in the latter part of the course. Three lectures and one laboratory per week. Soltzberg.

CHEM 550 Environmental Chemistry [taught at WIT] (S-1,2)

4 sem. hrs. Prereq.: PHYS 110, PHYS 111, CHEM 226, and MATH 118 or 238.

Analyzes and evaluates organic and inorganic contaminants and materials using state-of-the-art laboratory techniques. Covers identity and mobility of air, water, and soil pollutants. WIT staff. (For more information, view the WIT catalog online at www.wit.edu.)

CHEM 331/PHYS 331 Thermodynamics and Kinetics (F-1,2)

4 sem. hrs. Prereq.: CHEM 226, PHYS 113, and MATH 121.

Treats in detail the states of matter and the laws of thermodynamics (with applications to chemical and phase equilibria, and electrochemistry) and reaction kinetics and mechanisms. Laboratory studies once a week emphasize the application of concepts developed in the lectures. Kaplan.

CHEM 332/ PHYS 331 Quantum Mechanics and Molecular Structure (S-1,2)

4 sem. hrs. Prereq.: CHEM 226, PHYS 113, and MATH121.

Covers the wave mechanical treatment of atoms, atomic and molecular spectroscopy, theories of chemical bonding, molecular structure, and statistical mechanics. Laboratory work comprises spectroscopic and computer modeling studies. Soltzberg.

CHEM 341 Advanced Analytical Chemistry (S-2)

4 sem. hrs. Prereq.: CHEM 331.

Examines the theory and practice of selected modern methods in analytical chemistry. Covers computer methods in the laboratory with emphasis on data acquisition and the use of computers for extracting information from noisy data. Specific areas of modern analysis may include Fourier-transform NMR, electrochemical analysis, GC-mass spectrometry, spectrophotometric methods, and flow injection analysis. Staff.

CHEM 343 Advanced Organic Chemistry (S-1)

4 sem. hrs. Prereq.: CHEM 225.

Covers topics from synthetic and physical organic chemistry, beginning with a review of basic organic chemistry, including the synthesis of biologically significant molecules, Woodward-Hoffman rules, reaction intermediates, new synthetic methods, and biosynthetic pathways. Three lectures per week. Lee.

[CHEM 344 Advanced Physical Chemistry

4 sem. hrs. Not offered 2002-2004.] Prereq.: CHEM 331 and 332 and MATH 220.

Extends quantum and statistical mechanics to more complex problems in spectroscopy, reaction kinetics, and statistical thermodynamics than those introduced in CHEM 331 and 332. Three lectures per week. Staff.

CHEM 345 Advanced Topics in Biochemistry (S-1,2)

4 sem. hrs. Prereq.: CHEM 347.

Teaches modern biochemical techniques such as protein expression, protein purification, and enzyme assays. Emphasizes development of independent laboratory skills. Canfield, Lopilato.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

CHEM 346 Organic Spectroscopy (F-1,2)
4 sem. hrs. Prereq.: CHEM 225 and CHEM 226.
Covers the major spectrometric techniques used in determining the structures of organic materials, including infrared, mass, and Fourier transform nuclear magnetic resonance spectrometry (FTNMR). Three lectures and one laboratory per week. Staff.

CHEM 347 Biochemistry (F-1,2)
4 sem. hrs. Prereq.: CHEM 225 and CHEM 226 or consent of the instructor.

Covers organizing principles of living systems; structure and function of proteins, sugars, and lipids; mechanism and kinetics of enzymes; introduction to bioenergetics; and integration and control of metabolic pathways. One laboratory per week emphasizes modern instrumentation such as Western blotting, column chromatography, HPLC and spectrophotometric methods. Canfield.

CHEM 348 Advanced Inorganic Chemistry (F-2)

4 sem. hrs. Prereq. or concurrent: CHEM 332.

Presents structural and dynamic aspects of inorganic compounds, including ionic crystals, transition metal complexes, organo-metallics, and electron deficient species. Includes topics of current materials science interest, such as band theory of solids, shape memory metals, and polymers. Soltzberg.

CHEM 349 Directed Study (F-1,2; S-1,2)

4 or 8 sem. hrs.

Staff.

CHEM 350 Independent Study (F-1,2; S-1,2)

4 or 8 sem. hrs.

Selection of a research project involving scientific literature search and related laboratory work. Staff.

CHEM 355 Independent Study with Thesis (F-1,2; S-1,2)

8 sem. hrs.

Selection of a research project involving scientific literature search, followed by laboratory work required for solution of the problem. Results presented in a thesis. Staff.

CHEM 390 Chemistry Seminar (F-1,2; S-1,2)

No credit. Required of all chemistry, chemistry/pharmacy, and biochemistry majors.

Other interested students are invited to attend. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

Department of Communications

TBA, **Chair**

Lynda Beltz, **Professor**

Bob White, **Professor**

James Corcoran, **Associate Professor**

Nancy Brown Pawlyshyn, **Assistant Professor

Joan Abrams, **Instructor**

Judith Aronson, **Instructor**

Ellen Grabiner, **Instructor and
Multimedia Classrooms Manager**

Derrick Jackson, **Instructor**

Susan Larocque, **Instructor**

Barbara Skelly, **Instructor**

Sarah Burrows, **Internship Program Director**

Richard Dickinson, **Lecturer**

Nancy Faris, **Lecturer**

Shaun Gummere, **Lecturer**

Irene Shea, **Lecturer**

Alden Wood, **Lecturer**

***On leave academic year 2002-2003.*

The mission of the Department of Communications is to provide an intellectually broadening path of study of the media and preparation for the communications profession. The department faculty is committed to standards of excellence and to the creation of a climate where students strive to make a difference in the community.

The program emphasizes the development of critical thinking and problem-solving, superior writing capabilities, a contemporary visual intelligence, effective oral communication, and technical competence in the digital age. Students actively engage with the challenge of communication for the screen, the page, and the World Wide Web while gaining an understanding of the impact of the media on society and the individual and the influence of media convergence on the practice of communications.

These objectives are accomplished by a supportive environment of collaboration, creativity, and active engagement with experiential learning led by a faculty of professionals and scholars.

Major in Communications

The major in communications provides a foundation in the study of written, visual, and electronic media. Areas of specialization, called tracks, allow students to take developmental coursework in one area within the field. This program of study culminates in advanced coursework and capstone experiences like internships, independent study, and Studio Five—the department's student-run, professional communications workplace.

The communications major prepares students to enter the industry to become employed in a great variety of positions dealing with communications-related problems and opportunities that face contemporary businesses and organizations. Typical career paths are in the areas of publishing, print and broadcast journalism, public relations, advertising, video, graphic, Web, and multimedia design and production.

The major permits each student to develop a combination of courses that derives its coherence from the topic or career area of interest to the student. Each student majoring in communications is required to take forty semester hours of study in the department.

- Step One: Five core courses (20 semester hours)
- Step Two: Three developmental courses from one of the department's four tracks (12 semester hours)
- Step Three: Two required electives (8 semester hours)
- Step Four: Independent learning options (options offered by the department to fulfill the all-College independent learning requirement of 8 semester hours)

Step One: The Communications Core Requirements

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

The major requires five core courses exploring the areas of mass media and society, writing and editing, visual communications, and technology-driven media. A blend of theory with hands-on, practical projects prepares students for further developmental work in one of the department's tracks of study.

COMM 120	Communications Media
COMM 121	Visual Communication
COMM 122	Writing and Editing Across the Media
COMM 123	Communications Technologies
COMM 124	Media, Messages, Society

Students should complete the five core courses by the end of the second year of study in a four-year program. A student should declare her major at the end of the sophomore year. In this recommended sequence, the student would complete the core and then choose a track to declare at this time.

Step Two: Developmental Coursework

Starting in fall 2002, the department's academic program offers four tracks of study, replacing the former structure of three majors:

- Integrated Media
- Writing
- Design
- Public Relations/Marketing Communications

A student who has entered the College prior to the fall of 2002 may elect one of the new tracks if her schedule allows her to take the new core courses or by special arrangement with the department chair. Courses for the previous department majors will continue to be offered and thereby not interrupt the student's academic program. Students should see their academic advisers to plan remaining course requirements.

The step two developmental coursework has been organized into three required courses, normally taken in sequence. Step two work can begin during the first two years of a student's program and can be taken concurrently with step one, pro-

vided the student takes the necessary step one core courses. In some cases, it is highly desirable for the student to begin step two even during the first year. The student should consult with her academic adviser.

Step Three: Required Electives

Students will have a list of courses from which to choose two electives for their track in the communications major. This arrangement allows students optimum flexibility and an opportunity to build competencies across areas of the discipline.

Step Four: Independent Learning Options (Capstone Experiences)

Students majoring in communications have three options to complete the all-College independent learning requirement. The student should choose two of the three to complete the independent learning requirement in the department for a total of eight credits.

COMM 350	Independent Study
COMM 370	Internship
COMM 390	Studio Five: A Communications Workplace

The Tracks in the Communications Major

Integrated Media Track

Students may pursue an integrated media track that combines written, visual, and electronic media.

Step Two Requirements:

COMM 210	Introduction to Graphic Design: Principles and Practice
COMM 260	Journalism
COMM/ART 138	Basic Photography

Step Three Required Electives (choose in consultation with the faculty adviser):

COMM 181	Public Speaking and Group Discussion
COMM 186	Intro to Public Relations and Marketing Communications
COMM 220	Video Production

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

COMM 222	Animation
COMM 231	Alternative Processes in Photography
COMM 232	Photography and Writing
COMM 234	Photography in Paris: Art, Exploration and Self
COMM 237	Advanced Photography Workshop
COMM 239	Documentary Photography
COMM 244	Web I: Design for the World Wide Web
COMM 246	Digital Imaging
COMM 265	Editing Copy and Proof
COMM 310	Feature Writing
COMM 326	Advertising
COMM 330	Special Topics in Photography
COMM 332	Cyberspace
COMM 333	Web II: Motion Graphics for the Web

Writing Track

Students may pursue a writing track in journalism and/or professional writing.

Step Two Requirements:

COMM 260 Journalism

Choose two of the following

COMM 300 Professional and Technical Communication

COMM 310 Feature Writing

COMM 315 Opinion/Editorial Writing

Step Three Required electives (*choose two in consultation with the faculty adviser*):

COMM 263 Broadcast Journalism

COMM 265 Editing Copy and Proof

COMM 300 Professional and Technical Communication

COMM 310 Feature Writing

COMM 315 Opinion/Editorial Writing

COMM 327 Writing and Editing for Publications and Nonprofit Organizations

ENGL 105 Creative Writing: Non-Fiction

Design Track

Students may pursue a design track focusing on print, web, multimedia, or a combination.

Prerequisites: There are four prerequisites in the fine arts for students entering the design track. Three are required studio courses; one is an art history course. These courses may be taken concurrently with the communications core or with COMM 210 Introduction to Graphic Design: Principles and Practice. However, students should complete the prerequisites before moving to the intermediate level in step two.

Students in the design track need to take these three prerequisite studio courses:

ART 111 Introduction to Studio Art: Drawing

ART 112 Introduction to Studio Art: Color

COMM/ART 138 Basic Photography

Students may choose one of the following courses to satisfy the prerequisite in art history:

ART 141 Introduction to Art History: Egypt through Mannerism

ART 142 Introduction to Art History: Baroque to the 20th Century

ART 249 History of Photography

Step Two Requirements:

COMM 210 Introduction to Graphic Design: Principles and Practice of Design

COMM 240 Intermediate Graphic Design I: Typography

Choose one of the following

COMM 244 Web I: Design for the World Wide Web

COMM 248 Intermediate Graphic Design II: Type and Image

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

Step Three Required electives (*choose two in consultation with the faculty adviser*):

- COMM 244 Web I: Design for the World Wide Web
- COMM 246 Digital Imaging for Design
- COMM 248 Intermediate Graphic Design II: Type and Image
- COMM 333 Web II: Motion Graphics for the Web
- COMM 340 Advanced Design

Students who have successfully completed the design track requirements at Simmons College may take additional courses at Massachusetts College of Art through the Colleges of the Fenway consortium with the adviser's consent.

Public Relations/Marketing Communications Track

Students may pursue a track in PR/marketing communications and choose electives to focus in a particular area.

Step Two Requirements:

- COMM 186 Introduction to Public Relations and Marketing Communications
- COMM 281 Writing for Public Relations and Integrated Marketing Communications
- COMM 325 Public Relations Seminar

Step Three Required Electives (*two of the following after completion of step two and COMM 186*):

- COMM 181 Public Speaking and Group Discussion
- COMM 265 Editing Copy and Proof
- COMM 260 Journalism
- COMM 300 Professional and Technical Communication
- COMM 310 Feature Writing
- COMM 315 Opinion/Editorial Writing
- COMM 326 Advertising

Minors in Communications

Students who wish to pursue a minor in communications may do so by completing the five required core courses in the department. Other course sequences for minors are available through special collaborations with other departments. A student should consult with her adviser and/or the department chair for further information on special collaborations.

Interdepartmental Major in Art Administration

For more information, please see pages 55-57.

Post-Baccalaureate Program Leading to a Diploma in Communications

The diploma program can be completed in one year on a full-time basis or over a longer period of time on a part-time basis. It offers graduates of approved colleges an opportunity to pursue post-baccalaureate professional preparation in the field of communications. A typical program requires thirty-two semester hours of study and typically includes the following courses:

- COMM 120 Communications Media
- COMM 121 Visual Communication
- COMM 122 Writing and Editing Across the Media
- COMM 123 Communications Technologies
- COMM 124 Media, Messages, Society

Three electives (chosen in consultation with faculty adviser)

Core course(s) may be waived by the department chair if the diploma student enters with equivalent coursework. Evidence of completion of coursework is required. The student may take additional electives in lieu of the waived core course(s).

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

COURSES

COMM 120 Communications Media (M1)
(F-1,2; S-1,2)

4 sem. hrs.

Introduces communications arts and theory for the page, the screen, and the World Wide Web. Involves analysis of media from the point of view of the audience and production of media from the point of view of the communicator. Supplements examples and exercises in film, animation, multimedia, and the graphic arts with numerous screenings. White.

COMM 121 Visual Communication (M1)
(F-1,2; S-1,2)

4 sem. hrs.

Introduces the formal properties of visual literacy as they relate to graphic and information design, perception, semiotics, and visual persuasion. Develops understanding of the language and power of images in developing a visual intelligence. Involves lecture/lab. Grabiner, Skelly.

COMM 122 Writing and Editing Across the Media (F-1,2; S-1,2)

4 sem. hrs.

Introduces students to the fundamental skills of information gathering, writing, and copy editing for the mass media. Covers AP and other writing styles that students will eventually be expected to master to gain recognition as competent communicators. Includes news stories, press releases, web content, opinion articles, and memos. Beltz, Corcoran, Brown-Pawlyshyn.

COMM 123 Communications Technologies (S-1,2)

4 sem. hrs.

Offers a critical analysis of the digital revolution from the perspective of users and producers. Presents case studies on the impact of technology on the news, print production, public relations/marketing communications practices, and the creation of Web and multimedia communication. Explores how technology has concurrently expanded and reduced communications options. Introduces skill development in menu-based software applications. Team-taught. Involves lecture/lab. Brown-Pawlyshyn, Grabiner, Gummere, Shea.

COMM 124 Media, Messages, Society (M5)
(F-1,2; S-1,2)

4 sem. hrs.

Explores how and why the media reflect, affect, create, and mold public opinions, ideas, and values. Examines issues related to the media and society and the content of print and non-print media in terms of the written and visual messages they convey. Beltz, Corcoran.

COMM/ART 138 Basic Photography (M1)
(F-1,2; S-1,2)

4 sem. hrs.

Teaches the art and craft of contemporary black-and-white photography. Emphasizes how to use a camera, develop negatives, and make prints in order to create images that are visually powerful and significant to the photographer and her audience. Bresler, Sills.

COMM 181 Public Speaking and Group Discussion (F-1,2; S-1,2)

4 sem. hrs.

Involves preparation and presentation of speeches and consideration of the impact of information and communication on listeners. Provides extensive practice in discussion about present day problems and topics. Emphasizes rhetorical analysis, persuasion, and ethical issues in public speaking. Beltz, Abrams.

COMM 186 Introduction to Public Relations and Marketing Communications (F-1,2; S-1,2)

4 sem. hrs.

Explores the nature and role of communications in marketing and the integration of public relations, advertising, direct marketing, sales promotion, personal selling, and new media in the marketing communications plan. Analyzes marketing communications materials in various media and considers the economic and social implications of promotion. Includes a field assignment. Abrams, Beltz, Brown-Pawlyshyn.

COMM 210 Introduction to Graphic Design: Principles and Practice (M1) (F-2; S-1,2)

4 sem. hrs. Prereq.: COMM 120, 121, and 123.

Addresses formal principles, process, and production of 2D design. Complements design lectures, demonstrations, and student presentations with

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

studio projects and critiques. Provides tools to develop conceptual skills; master mechanical tools; utilize design-driven software applications; prepare visual, written, and oral presentations; and learn the process and techniques needed to achieve quality design. Involves lecture/lab. Aronson, Larocque, Skelly.

COMM 220 Video Production (M1) (F-1,2; S-1,2)

4 sem. hrs. Prereq.: COMM 120 or consent of the instructor.

Explores the working methods and production of narrative, documentary, and music video filmmaking. Examines professional examples and requires students to plan, shoot, and edit their own short pieces in the department's digital video editing suite. Teaches the variety of conditions that lead to the creation of good short production for tape, the screen, or the World Wide Web. White.

COMM 222 Animation (M1) (F-1,2; S-1,2)

4 sem. hrs. Prereq.: COMM 120 or consent of the instructor.

Studies the aesthetics of animation as applied to all art forms, from fifty small drawings in a flipbook or on a loop of clear film to a computer-generated *Toy Story* character. Considers the future use of computers as cameras to scan, pan, zoom, spin, and play back. Teaches production of various types of animation. White.

COMM/ART 231 Alternative Processes in Photography (F-2)

4 sem. hrs. Prereq.: COMM/ART 138 or consent of the instructor.

Offers experimentation with nontraditional techniques and equipment to make photographic images using handmade and "toy" cameras (as well as 35mm cameras), found pictures, and Xerography to make negatives. Print making includes toning, hard-coloring, Polaroid transfers, cyanotypes, and Van Dyke processes. Class time divided among lab work, discussion of historical and contemporary alternative photography, and critiques of student work. Sills.

[COMM/ART 234 (STC) Photography in Paris: Art, Exploration, and Self (M1)

4 sem. hrs. Not offered in 2002-2004.]

Explores with camera and pen the culture(s) of Paris. Looks at the ordinary life and the extraordinary art of Paris – in museums and galleries, in cathedrals and palaces and parks, on the street, and in cafes and flea markets. Reflecting upon discoveries and impressions with a camera and a journal, students create photographic art that is about Paris and the experience of exploration. Enables students 1) to use the camera and photographic processes with skill to foster their creative potential and to heighten visual awareness, 2) to use the process of creating art as a means to learn about a culture different from their own, and 3) to gain familiarity with and appreciation for historical and contemporary photography of France. Sills.

COMM/ART 237 Advanced Photography Workshop (F-2, S-1)

4 sem. hrs. Prereq.: COMM/ART 138.

Provides students an opportunity to develop their photographic vision through a study of different techniques, a refinement of exposing and developing skills, and projects designed to express ideas and imagination. Readings and study of other photographers' work are included. Sills.

COMM/ART 239 Documentary Photography (S-1)

4 sem. hrs. Prereq.: COMM/ART 138.

Offers an opportunity to use photography to describe, understand, and interpret the world around us by creating photographic essays on subjects of students' choosing. Gives attention to refining technical skills while delving into aesthetic issues of significance and meaning in our images. Studies the documentary tradition as a basis to develop work. Sills.

COMM 240 Intermediate Graphic Design I: Typography (F-1; S-1,2)

4 sem. hrs. Prereq.: COMM 210 or COMM 140.

Applies the formal principles of design in the context of typography. Explores topics including history, terminology, display, and text type for print and screen communication; typographic hierarchy in information design; bookmaking; concept-based design through typographic layout; and expression

F = Fall
 S = Spring
 U = Summer
 STC = Short-Term Course
 1 = Academic Year 2002-2003
 2 = Academic Year 2003-2004
 M = Mode

and manipulation. Includes lectures, discussions, class critiques, and computer lab session. Aronson.

COMM 242 Layout and Production (F-1)

4 sem. hrs. (to be discontinued after spring 2003.)

Introduces the techniques and processes that convert word and picture copy to the printed page. Includes lecture/lab. Shea, Skelly.

COMM 244 Web I: Design for the World Wide Web (F-1,2; S-1,2)

4 sem. hrs. Prereq.: COMM 210.

Introduces the essential concepts and tools necessary to produce web sites. Includes understanding HTML syntax, authoring Web pages, creating and editing Web graphics, establishing site hierarchy, and designing information architecture. Requires students to create effective user interfaces, test for usability, and manage the Web site development process. Grabiner, Gummere.

COMM 246 Digital Imaging for Design (S-1,2)

4 sem. hrs. Prereq.: COMM 123.

Explores problem-solving techniques and approaches to creating, acquiring, manipulating, and disseminating images for use in print, Web, and multimedia communication. Covers concepts of media literacy and accessibility. Requires individual and group projects using digital cameras, natural media, and Photoshop and Illustrator. Grabiner.

COMM 248 Intermediate Graphic Design II: Type and Image (F-1,2)

4 sem. hrs. Prereq.: COMM 240.

Involves designing professional pieces based on research and analysis to develop an understanding of the problem-solving process and a conceptual basis for design work. Emphasizes generating and combining type and image to strengthen a message. Addresses information hierarchy, sequencing, and grid development on the computer. Includes publications and Webzines, organization identity programs, and expressive use of typography. Aronson.

COMM/ART 256 Approaches to Individual Expression in Photography (F-1)

4 sem. hrs. Prereq.: COMM/ART 138.

Expands explorations in photography through self-designed photographic projects. Refines visual and technical skills. Includes two or three long-term projects, critiques, discussion of the work of art photographers, visits to exhibitions, and technical exercises. Sills.

Includes two or three long-term projects, critiques, discussion of the work of art photographers, visits to exhibitions, and technical exercises. Sills.

COMM/ART 258 Digital Color Photography (S-2)

4 sem. hrs. Prereq.: COMM/ART 138.

Designed for students to learn color photography using Photoshop. Employs traditional and/or digital cameras to create digitally realized "straight" prints and to manipulate photo-based imagery. Staff.

COMM 260 Journalism (M5) (F-1,2; S-1,2)

4 sem. hrs. Prereq.: COMM 122.

Immerses students into journalism by covering community issues and events ranging from local and national politics to entertainment and sports. Teaches how to identify news values and make news judgments, as well as develop note-taking and interviewing skills, understand media ethics and law, and cultivate news and feature writing techniques. Corcoran, Jackson.

COMM 265 Editing Copy and Proof (F-1,2)

4 sem. hrs. Prereq.: COMM 122 and 260.

Teaches how to perceive and correct errors in language written by others. Includes use of professional copyediting symbols and techniques to make needed changes (in spelling, punctuation, word selection, etc.) before the final wording, or "copy," is readied for printing or broadcast. Explains proofreading techniques. Explores basic pre-writing practices, e.g., ranking and organization of raw story data for a news release or letter to the editor. Wood.

COMM 263 Broadcast Journalism (S-1,2)

4 sem. hrs. Prereq.: COMM 260.

Involves reporting, videotaping, script writing, and videotape editing for the broadcast media. Includes actual news and documentary assignments with production of broadcast news packages utilizing state-of-the-art digital video editing techniques. Staff.

COMM 281 Writing for Public Relations and Integrated Marketing Communications (S-1,2)

4 sem. hrs. Prereq.: COMM 122 and 186.

Explores the role and function of public relations and marketing communications materials. Examines

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

techniques of writing and editing for identified target publics. Involves producing marketing communications materials intended for internal and external audiences and analyzing the communications efforts of a publicly traded company. Abrams, Beltz, Brown-Pawlyshyn.

COMM 300 Professional and Technical Communication (F-2)

4 sem. hrs. Prereq.: COMM 122 or consent of the department.

Introduces basic principles and forms of professional and technical communication suitable for business, technology, and science. Prepares students for professional practice in clear and accurate communication, including documentation, web content, proposals and articles for business or technical publication, and writing and presenting visual and numerical data. Includes team projects that also help develop project management, teamwork, and oral presentation skills. Brown-Pawlyshyn.

COMM 310 Feature Writing (F-1,2; S-1,2)

4 sem. hrs. Prereq.: COMM 122 and 260.

Builds upon skills and techniques learned in journalism and other writing courses. Challenges students to think, to see stories in their fullness, and to become involved in their own writing. Teaches a narrative style that encourages critical thinking and engages writers, giving them the foundation to put more human aspects into their stories. Includes class discussion and critique of student work. Corcoran.

COMM 315 Opinion/Editorial Writing (S-1,2)

4 sem. hrs. Prereq.: COMM 122.

Emphasizes persuading readers, or at least getting their attention. Develops research skills to defend arguments. Requires subscribing to current newspapers to examine how top columnists craft their commentary. Students produce editorials and columns suitable for publication. Corcoran, Jackson.

[COMM 320 Media and the First Amendment
4 sem. hrs. Not offered in 2002-2004.]

Examines the news media's First Amendment rights and responsibilities, addressing libel, privacy, fairness, and objectivity, as well as current media issues. Discusses the ethical and legal ramifications of communications in a democratic society. Corcoran.

COMM 325 Public Relations Seminar (S-1,2)

4 sem. hrs. Prereq.: COMM 186 and 281.

Surveys public relations methods, research, theories, practices, and campaigns. Discusses the ethics and values of public relations as a profession. Includes case study analysis. Abrams, Beltz, Brown-Pawlyshyn.

COMM 326 Advertising (F-1,2)

4 sem. hrs. Prereq.: COMM 186.

Introduces basic elements of advertising theory and practice with an emphasis on the role of creating effective and results-oriented advertising messages. Analyzes advertising case studies to explore concepts and apply them to real world examples. Provides tools to develop writing and design skills and create portfolio samples. Includes a team project to create an advertising campaign for a client of choice. Team-taught. Dickinson, Faris.

[COMM 327 Writing and Editing Publications
for Companies and Non-Profit Organizations

4 sem. hrs. Not offered in 2002-04.] Prereq.:
COMM 122, 265, and 281.

Explores various specialized types of editing and writing, including company or institutional newspapers, newsletters, magazines, annual reports, web sites, and personnel handbooks. Abrams, Beltz, Brown-Pawlyshyn.

COMM/ART 330 Special Topics in Photography (S-2)

4 sem. hrs. Prereq.: COMM/ART 138 and two additional photography courses or consent of the instructor.

Delves deeply into the practice and theory of photography. General topic is contemporary photography, with readings by Barthes, Sontag, and other theoreticians considered in relation to the work of students and contemporary photographers. Sills.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

COMM 332 Cyberspace (S-2)

4 sem. hrs.

Explores the exciting world of multimedia—that interactive dimension that incorporates text, pictures, sound, animation, and video for CD-ROMs and the Internet. Offers an overview of digital media featuring examples found in publishing and entertainment, along with a series of exercises created with Photoshop and industry-standard software. White.

COMM 333 Web II: Motion Graphics for the Web (S-1,2)

4 sem. hrs. Prereq.: COMM 244.

Explores the emerging field of experience design, investigating several core concepts such as advanced information design, narrative, auditory experience, interactivity, and emotional depth. Examines ways interactive multimedia add meaning to online communication and addresses concepts of a global visual language in which the use of familiar symbols and images transcends spoken language. Grabiner, Gummere.

COMM 340 Advanced Design (S-1,2)

4 sem. hrs. Prereq.: COMM 240 and 248.

Increases understanding of the designer's role as problem solver and professional design consultant. Provides opportunity to create new portfolio-quality work and explore development of a personal style. Involves creating prototypes for two complex projects: redesigning a text and image book with accompanying Webzine and creating a branding system for a local institution or retailer. Aronson.

COMM 350 Independent Study (F-1,2; S-1,2; U-1,2)

4 sem. hrs. Prereq.: Consent of the department chair. Staff.

COMM 370 Internship (F-1,2; S-1,2; U-1,2)

4-8 sem. hrs. Prereq.: Junior or senior standing (senior standing required for eight semester hours), declared major in communications, consent of the instructor, and application filed by Oct. 15 for spring semester or March 15 for summer or fall semesters. Burrows.

NOTE: Contact department chair for special consent for two-semester-hour internships during January intersession or sixteen-semester-hour internships for full time work commitment.

COMM 390 Studio Five: A Communications Workplace (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Completion of the communications department core and track requirements or consent of the instructor.

Provides a faculty-supervised workplace where students undertake projects for non-profit clients while working as collaborative teams. Requires analyzing client communications needs and providing optimal solutions on budget and deadline. Integrates relevant issues of agency/client relationships, vendor relations, and project management. Brown-Pawlyshyn, in collaboration with department faculty.

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

Program in Computer Science

Bruce Tis, **Director and Associate Professor**
Margaret Menzin, **Professor**
Nanette Veilleux, **Assistant Professor**
Laurie L. Vadeboncoeur, **Lecturer**

Major in Computer Science

Computer science is the study of:

- the representation, processing, and management of information
- the development of algorithmic processes
- the analysis, design, and implementation of software systems
- the design, implementation, and management of computer networks and hardware
- the application of advanced technology

The program in computer science strikes a balance between theory and practice to prepare students for graduate school and industry. Graduates attend graduate school or take jobs in industry as software engineers, programmers, systems analysts, web developers, network and system managers, database architects, and computing security analysts.

Students in the computer science program learn to think critically, logically, and abstractly. They gain both an understanding of the underlying theory and concepts of computing as well as the facility to integrate theory with practice. They learn to solve problems through the development and application of advanced technology. As a result of completing team projects, students also develop the ability to work in groups, assume leadership roles, communicate effectively, and solve significant problems. All courses have structured weekly laboratory sessions where theory is related to state-of-the-art practice.

The major also provides an opportunity to pursue an interest in computing within the context of another academic discipline; hence, students are encouraged to broaden their experience

by completing a joint major or a minor in another discipline.

Students are encouraged to fulfill the College's independent learning requirement through the established internship program.

Requirements: A major in computer science requires the following core courses:

CS 112-113	Introduction to Computer Science I-II
CS 226	Computer Organization and Architecture
CS 227	Computer Networks
CS 232-233	Data Structures and Analysis of Algorithms I-II
CS 330	Structure and Organization of Programming Languages
CS 345	Operating Systems
MATH 120	Calculus I
MATH 210	Discrete Methods
PHIL 225	Ethical, Legal, and Social Issues in IT

In addition, students will take two electives from:

CS 327	Security Issues in a Networked Environment
CS 333	Data Base Management Systems
CS 334	Special Topics in Computer Science
CS 335	Object Oriented Design and Software Development
CS 343	Systems Analysis
CS 348	Artificial Intelligence

A student will normally take CS 112-113 and MATH 120 in the first year; CS 232-233 and MATH 210 as a sophomore; CS 226-227 as either a sophomore or junior; and PHIL 225, CS 330, CS 345, and her electives in her junior and senior years. It is also possible to start the major as a sophomore. Courses required for the major may not be taken pass/fail.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Major in Management Information Systems (MIS)

This joint major is designed for students who are interested in both management and computer science. Management information systems (MIS) is a well-established field that prepares managers to use computer technology to achieve business goals and system analysts and programmers to design and implement business application systems.

Requirements: The MIS major includes seven courses in management, seven courses in computer science, and five prerequisite courses in other departments. For complete information, see pages 142-143.

Minor in Computer Science

A minor in computer science consists of CS 112 and 113, either CS 226-227 or CS 232-233 (note: CS 233 has a prerequisite of MATH 210), and one other computer science course numbered above 102.

Integrated BS/MS Program

Two integrated programs permit students to obtain their BS and MS degrees in less time than it would take to do the programs separately. Students begin the MS degree program during their junior year. The integrated program in education is described under the Department of Education and Human Services on pages 118-119. Information about the integrated program in computer science and library and information science is available from the mathematics department or from the Graduate School of Library and Information Science.

COURSES

CS 101 www.computing.you (M3) (F-1,2; S-1,2)

4 sem. hrs. Prereq: math competency

Surveys computer science using Web programming and the Internet. Provides an introduction to computer architecture and the representation of information. Covers programming in HTML and JavaScript for interactive Web pages and numerical

and graphical algorithms for simulation and problem solving. Includes basic concepts in human-computer interaction and Web site design. No previous background required. Menzin, Veilleux.

CS 102 Computer-Aided Problem Solving (F-1,2; S-1,2)

4 sem. hrs. Prereq: math competency.

Uses computer-based tools to analyze and solve problems in many disciplines. Provides basic understanding of the Internet and computers but emphasizes problem-solving skills such as finding information on the World Wide Web, using spreadsheets to analyze information quantitatively, creating databases, presentation graphics for reports, and learning computerized tools for organizing projects. Staff.

CS 112 Introduction to Computer Science I (M3) (F-1,2)

4 sem. hrs.

Introduces computer science and programming using a high-level programming language (currently Java). Teaches program design in the context of contemporary practices both object oriented and procedural. Presents fundamental computer science topics through initiation and design of programs. Requires two significant projects. Veilleux.

CS 113 Introduction to Computer Science II (M3) (S-1,2)

4 sem. hrs. Prereq.: CS 112.

Continues the work done in CS 112, with emphasis on GUI and event-driven programming. Requires two significant projects. Veilleux.

CS 226 Computer Organization and Architecture (M3) (F-1,2)

4 sem. hrs. Prereq.: CS 112 or equivalent or consent of the instructor.

Studies the structure and function of computer hardware, with an emphasis on performance. Includes history of computers, information representation, hardware components and their functions, buses, internal and external memory, input/output, CPU, and instruction sets. Tis.

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

CS 227 Computer Networks (S-1,2)

4 sem. hrs. Prereq.: CS 112 or consent of the instructor.

Introduces the concepts, design, implementation, and use of computer networks. Covers data communication concepts, layered architectures, protocols, LANs, WANs, internetworking, security models, the Internet, intranets, network management, and network applications with an emphasis on TCP/IP. Tis.

CS 232 Data Structures and Analysis of Algorithms I (F-1,2)

4 sem. hrs. Prereq.: CS 113.

Topics include abstract data types and objects; strings, vectors, linked lists, stacks, queues, graphs, and trees; hashing and methods of information retrieval; searching and sorting; pattern matching; simulation; and computational complexity. Uses applications to both computer science and commercial problems. Tis.

CS 233 Data Structures and Analysis of Algorithms II (S-1,2)

4 sem. hrs. Prereq.: CS 232, MATH 210.

Continuation of CS 232. Includes a major project. Tis.

CS 327 Security Issues in a Networked Environment (F-2)

4 sem. hrs. Prereq.: CS 227.

Addresses the need for authentication, confidentiality, and integrity of data in a networked environment. Examines the services and mechanisms currently available to prevent successful attacks. Includes security models, encryption, digital signatures and certificates, authentication techniques, email confidentiality, firewalls, Web servers, malware, and security management strategies. Tis.

CS 330 Structure and Organization of Programming Languages (F-2)

4 sem. hrs. Prereq.: CS 233, CS 226 or consent of instructor.

Provides a comparison of a variety of languages and language paradigms (object-oriented, modular, event-driven) with respect to data structures, control structures, and actual implementation. Investigates these issues in several languages (currently JAVA, C++, Perl, and assembly). Presents formal language

specification including regular, context-free, and ambiguous languages. Veilleux

CS 333 Data Base Management Systems (S-2)

4 sem. hrs. Prereq.: CS 112

Offers comprehensive examination of the design and implementation of relational database management systems (DBMS). Teaches the logical organization of databases, application packages, languages for data description and retrieval, concurrency, security issues, and the appropriateness of each major type of DBMS. Includes a major project. Veilleux.

CS 334 Special Topics in Computer Science (S-2)

4 sem. hrs. Prereq.: Junior standing or consent of the instructor.

Offers an intensive study in a particular area of computer science focusing on advanced issues. Intended for juniors and seniors concentrating in computer science. Topic varies but may include natural language processing, advanced networking, system/network management, systems programming, network programming, server-side programming and issues, cryptology, and wireless technologies. Staff.

CS 335 Object-Oriented Design and Software Development (S-1)

4 sem hrs. Prereq: CS 233.

Applies object-oriented techniques, using C++ and JAVA, to the entire software development cycle, from analysis, through design, to implementation. Emphasizes good design practice in an event-driven, GUI environment. Includes teamwork on a significant application problem, culminating in a capstone project. Veilleux.

CS 343 Systems Analysis (F-1)

4 sem. hrs. Prereq.: One of MGMT 110, CS 333, MGMT 286 and one of CS 101, CS 102, or CS 112.

Note: After fall 2002, students are referred to IT 341.

Teaches the strategies involved in designing a complex computer-based application system: identifying stakeholders, gathering information (surveys, interviews, artifacts, etc.), writing requirements, analyzing for technical and financial feasibility, setting priorities, planning and managing projects, and designing for usability. Includes extensive Use Cases and UML

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

for in-depth examples. Involves team projects.
Menzin.

CS 345 Operating Systems (S-2)

4 sem. hrs. Prereq.: CS 226, CS 232.

Teaches the function, use, and design of operating systems, including detailed study of the UNIX system. Topics include concurrent processes, system nucleus, memory management, I/O, the file system, resource allocation, scheduling, security, concurrency command processing, and shell programming. Tis.

[CS 348 Artificial Intelligence

4 sem. hrs. Not offered in 2002-2004.] Prereq.: CS 233.

Broadly introduces basic techniques used today in building intelligent computer systems. Topics include state-space representations, knowledge representations, heuristic search, predicate calculus, and resolution theorem-proving. Also discusses topics in knowledge-based expert systems, natural language processing, and robotics. Staff.

CS 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the instructor.

CS 350 Independent Study (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the instructor.

CS 370 Internship (F-1,2; S-1,2)

8 sem. hrs. Prereq.: Junior or senior standing and consent of the department.

Program in East Asian Studies

Zachary Abuza, Director, Assistant Professor of Political Science/International Relations

Jyoti Puri, Associate Professor of Sociology and Women's Studies**

Masato Aoki, Assistant Professor of Economics

Zhigang Liu, Assistant Professor of History and Modern Languages and Literatures

Saam Trivedi, Assistant Professor of Philosophy

Jessica Robash, Administrative Assistant

**On leave academic year 2002-2003.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

The major in East Asian studies (EAS) is designed to provide students with knowledge and understanding of East Asia, a region that has become increasingly significant in the post-Cold War era. Students acquire this knowledge by studying an East Asian language as well as courses in other disciplines, including art history, economics, history, literature, management, philosophy, political science, and religion. The East Asian studies major prepares students for further growth beyond college along a variety of paths, including graduate programs, employment overseas or in business and institutions specializing in East Asia, and service within and to the Asian American community.

A minor in East Asian studies allows students to enhance their major academic program with an understanding of the history, politics, and culture of the region of East Asia. A minor does not require language courses.

Major in East Asian Studies

(44 semester hours)

Requirements: Students must take five courses from the EAS curriculum, including at least one of HIST 201, HIST 202, or HIST 206. No more than three courses can be taken in any one department.

EAS Curriculum	(20 semester hours)
ART 252	Arts of the Far East: China and Japan
CHIN 310	Chinese Civilization: Past and Present
ECON 150	The Japanese Economy
HIST 201	The Dynamics of Japanese History
HIST 202	Asia to the 18th Century
HIST 203	History of East Asian and US Foreign Relations
HIST 204	Japanese Cultures: Gender, Family, and Society
HIST 206	The Rise of Modern China
HIST 207	Gender, Family, and Society in Modern China
HIST 302	Seminar in Reforms and Revolutions in Asia
JAPN 310	Japanese Civilization
PHIL 133	Asian Philosophy
POLS 225	International Politics of East Asia
POLS 228	The Vietnam War: An Integrated Approach
POLS 245	Politics of Newly Industrializing Countries
SOCI 267	Globalization, Transnationalization, and Cultures of Resistance

Language Courses (16 semester hours)

Students are required to study an East Asian language for two years. Students who enter Simmons with at least an intermediate knowledge of an Asian language will be evaluated by a member of the modern languages and literatures department. In such cases, the language requirement for the major can be satisfied in one of three ways. First, the student can complete four semesters of continued study of the same language. Second, the student can complete four semesters of study of another Asian language. Third, the student can complete four additional courses from the EAS curriculum. Students who

enter Simmons with an understanding of an Asian language below an intermediate level can satisfy the language requirement by language study that would raise the student's competence to the intermediate level, plus either further courses in languages or courses from the EAS curriculum.

Capstone Cross-Cultural Experience (12-16 semester hours)

This requirement consists of two phases:

1. Study abroad or community-based learning. To encourage exposure to and immersion in cross-cultural experiences, students complete four semester hours through study abroad or community-based learning within an Asian-American community. Although most students will study abroad, a community-based learning experience may be designed in consultation with a faculty adviser. Students should have adequate language preparation and a significant portion of coursework completed before either the international or community-based learning experience. Thus, most students will satisfy this requirement during the junior or senior year. The timing of the study abroad or community-based learning experience will be decided in consultation with the student's adviser.

2. Independent Learning and Integrative Seminar.

Students in the major must complete eight semester hours of independent learning in order to fulfill the College-wide requirement. This requirement has two parts. First, the student must take the EAS 390 Integrative Seminar in her final semester. In the seminar, the student will produce either a research paper or some form of creative work associated with a special interest (eg, poetry, short stories, artwork, etc.). The nature and scope of the project will be collaboratively determined with the seminar instructor. Note: On a temporary basis, other courses may be offered in place of EAS 390. Please contact the program director for further information. Students will complete this part of the requirement in consultation with their advisers and should contact the program director for further information.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

The second component may be fulfilled in one of three ways: fieldwork, internship, or independent study. This component can be taken either within or outside the East Asian studies major.

Minor in East Asian Studies

A minor in East Asian studies consists of five courses from the EAS curriculum, two of which may be replaced by East Asian language courses.

COURSES

EAS 350 Independent Study (F-1,2; S-1,2)

4 sem. hrs.

Staff.

EAS 370 Internship (F, S, 1-2)

4-8 sem. hrs.

Staff.

EAS 380 Fieldwork (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the department.

[EAS 390 Integrative Seminar

4 sem. hrs. Not offered in 2002-2004.] Prereq.:
Consent of the department.

Alternative courses will be offered in place of EAS 390 for the 2002-2004 period.

Department of Economics

Barbara Sawtelle, **Chair and Professor**

Donald Basch, **Professor**

Carole Biewener, **Professor**

Masato Aoki, **Assistant Professor**

Niloufer Sohrabji, **Assistant Professor**

Maria Callejas, **Staff Assistant**

A major in economics provides students with an excellent background for careers in finance, industry, government, and the nonprofit sector; moreover, it prepares students for graduate work in economics, law, business, and public policy. Economics majors develop their institutional knowledge about the business world, the economic environment in which businesses operate, and the governmental policies that affect businesses. Further, economics majors gain the ability to analyze complex issues and to communicate the results of their analysis. The internship in economics allows majors to develop and apply their skills and knowledge in a professional setting.

Policymakers at all levels of business, government, and the nonprofit sector must frequently evaluate complex economic issues, while intelligent citizenship makes increasing demands on an individual's knowledge of economics. Introductory economics courses at Simmons give students a basis for understanding and evaluating the operation of the American economy and other types of economies. Also, economic tools are increasingly important to studies of health care, the environment, gender, race discrimination, technology, government behavior, population growth, international relations, crime, and other domestic and global issues of public and private life. Upper-level economics courses integrate empirical work and theoretical analysis in the study of specific issues.

In addition to providing a thorough core curriculum in economics, the Department of Economics has a special emphasis in public policy. Specific policy areas covered by the department's course offerings include public economics,

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

antitrust, regulation and deregulation, environmental economics, economic development, and international economics.

Major in Economics

Requirements: The courses required for the economics major are:

ECON 100	Principles of Microeconomics
ECON 101	Principles of Macroeconomics
MATH 118	Introductory Statistics
ECON 200	Intermediate Microeconomics
ECON 201	Intermediate Macroeconomics
ECON 203	Economic Models and Quantitative Methods

Twelve semester hours of economics electives

Eight semester hours of internship or independent study

ECON 100 and ECON 101 are basic to all other work in economics and should be completed no later than the sophomore year if considering a major in economics. MATH 118 should also be taken early in the economics major; MATH 238 Applied Statistical Models can be substituted for MATH 118.

In addition to ECON 100, ECON 101, and MATH 118, majors are required to complete ECON 200, 201, and 203 and must also complete a minimum of twelve semester hours of economics electives. ECON 200 is the intermediate-level counterpart to ECON 100, ECON 201 is the intermediate-level counterpart to ECON 101, and ECON 203 provides an overview of economic modeling and quantitative methods used in economic analysis. Normally, majors will complete ECON 200, 201, and 203 by the end of the junior year. MATH 120 (or its equivalent) may be used as a substitute for ECON 203. Students using MATH 120 are required to add a fourth economics elective to complete their economics major; such students should confer with the ECON 203 instructor concerning the parts of ECON 203 they might usefully review. Among the array of electives available, ECON 393 Econometrics is strongly recommended for economics majors.

Economics majors must also complete eight semester hours of independent learning in order to fulfill the all-College requirement. While the independent learning requirement may be completed in other departments, students are encouraged to consider completing the requirement within economics. The independent learning requirement can be met within the department through any combination of ECON 350 Independent Study, 370 Internship, 390 Special Topics, 393 Econometrics, and 395 Feminism and Economic Difference. ECON 350 and 370 do not count toward the twelve-semester-hour elective requirement for the economics major. If used for independent learning, ECON 390, 393, and 395 also do not count toward the elective requirement.

Economics is complemented by a number of other fields of study in both the liberal arts and sciences and in the professional areas. The department cooperates informally with the College's other social science departments in offering courses in the areas of public policy and international relations. A number of economics students declare double majors, a practice that the department encourages. Majors that are particularly attractive in combination with economics are political science, international relations, mathematics, management, and communications.

Our graduates use economics as a springboard for a wide variety of careers and for a broad range of graduate study. For most such careers and graduate study, completing the requirements for the economics major provides a powerful base. Students specifically interested in pursuing graduate study in economics (to either the master's or doctoral level) should seriously consider bolstering the economics major with study in mathematics, which can be achieved through a joint economics-mathematics major or a double major in economics and mathematics.

Joint Major in Economics and Mathematics

The formal joint major in economics and mathematics is offered with the Department of Mathematics and is administered by the

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

Department of Economics. This specialization has arisen to meet the needs of economics students realizing the increased role of mathematics and statistics in economic analysis. Also, for those students with good mathematical aptitude who do not wish to specialize only in mathematics, the joint major in economics and mathematics provides the opportunity to develop a field of applied mathematics.

Requirements: ECON 100 Principles of Microeconomics and ECON 101 Principles of Macroeconomics are basic to all other work in economics and should be taken no later than the second year by students considering the joint major.

Students electing this joint major are also required to complete the following courses:

ECON 200	Intermediate Microeconomics
ECON 201	Intermediate Macroeconomics
ECON 393	Econometrics
MATH 120	Calculus I
MATH 121	Calculus II
MATH 220	Multi-variable Calculus
MATH 211	Linear Algebra
MATH 238	Applied Statistical Models, and
MATH 339	Probability and Mathematical Statistics

Also required for the joint major in economics and mathematics are an internship or independent study of eight semester hours and at least three electives chosen from economics or from MATH 320 Introduction to Real Analysis I or MATH 317 Numerical Methods.

Joint Major in Financial Mathematics

The Department of Economics also offers a joint major in financial mathematics with the Department of Mathematics. This major is intended to serve students who are interested in applying the principles of mathematical and economic analysis in the financial services industry. Students graduating with this major might become stock analysts, bond traders, or decision

analysts at consulting firms; work in the pension/annuity industry; or go to graduate school in the growing area of financial mathematics.

The requirements for the joint major in financial mathematics are described in the listings for the Department of Mathematics.

Minor in Economics

A minor in economics requires ECON 100 Principles of Microeconomics, ECON 101 Principles of Macroeconomics, and three economics electives chosen from among the following:

ECON 125	Women and Work
ECON 150	The Japanese Economy
ECON 214	Women in the World Economy
ECON 216	Economic Development
ECON 218	International Trade
ECON 220	International Monetary Systems
ECON 225	Political Economy of US Capitalism
ECON 231	Money and Banking
ECON 236	Public Economics
ECON 239	Government Regulation of Industry
ECON 241	Business Competition and Antitrust Policy
ECON 242	Managerial Economics
ECON 247	Environmental Economics
ECON 390	Special Topics in Economics
ECON 393	Econometrics
ECON 395	Feminism and Economic Difference

Minor in Public Policy Studies

Public policy concerns the actions of governments and the objectives that guide those actions. The 80,000 governments that make up the American system have a profound effect on the daily life of their citizens.

Students are drawn to study public policy for various reasons. Many students may hope to work

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

for local, state, or national governments at some point in their careers. Students who plan to work in the private sector increasingly find that government affects their professional and personal activities. In addition, all students who desire to become more informed citizens find their lives enriched by an appreciation of how, and to what effect, government acts.

The interdisciplinary field of public policy is organized around four related sets of questions:

- Who or what influences the direction of government action?
- What “tools” are available to address societal problems?
- What are the effects of government actions?
- What are the appropriate normative questions about how policy is made and what government actually does?

The study of public policy requires a basic grounding in economics and political science. Students are therefore required to take introductory courses in each of those fields. Since the upper-level public policy courses in economics are all microeconomics-based, ECON 100 Principles of Microeconomics is required.

The minor consists of five courses:

ECON 100	Principles of Microeconomics
POLS 101	Introductions to American Politics
POLS 217	American Public Policy
<i>plus two of the following</i>	
ECON 236	Public Economics
ECON 239	Government Regulation of Industry
ECON 241	Business Competition and Antitrust Policy
ECON 247	Environmental Economics

COURSES

ECON 100 Principles of Microeconomics (M5) (F-1,2; S-1,2)

4 sem. hrs.

Covers basic principles governing the behavior of consumers and business firms in the economy. Introduces the price system under conditions of competition, monopoly, and governmental regulation. Includes applications to public policy topics such as the wage gap, monopoly power in the computer software industry, free trade, and environmental protection. Staff.

ECON 101 Principles of Macroeconomics (M5) (F-1,2; S-1,2)

4 sem. hrs.

Provides perspective on economy as a whole. Examines how interactions among national levels of consumption, saving, investment, trade, and government policy cause inflation, unemployment, and economy's oscillation between prosperity and recession. Pays close attention to current macroeconomic events, including changes in Federal Reserve's monetary policy and fiscal impact of the national budget. Staff.

ECON 125 Women and Work (M5) (F-1,2)

4 sem. hrs.

Introduces the history of women in the US economy and contemporary issues concerning women and work. Focuses on similarities and differences among women's work experiences in terms of race, ethnicity, and class. Issues include labor-market discrimination, the wage gap, immigration, welfare reform, and affirmative action. Biewener.

ECON 150 The Japanese Economy (S-1,2)

4 sem. hrs.

Introduces economics and the modern Japanese economy. Surveys Japan's economic development, industrial organization, economic policies, financial institutions, labor relations, women in the economy, place in the world economy, and cultural factors. Compares Japanese and US economies. Emphasizes topics of students' interests. Aoki.

F	= Fall
S	= Spring
U	= Summer
STC	= Short-Term Course
1	= Academic Year 2002-2003
2	= Academic Year 2003-2004
M	= Mode

ECON 200 Intermediate Microeconomics (F-1,2)
4 sem. hrs. Prereq.: ECON 100 and 101.

Provides an intermediate study of the theory of consumer choice, producer choice, market structures, general equilibrium, and welfare economics. Specially emphasizes the efficiency of market allocation of resources and the causes of market failure. Basch.

ECON 201 Intermediate Macroeconomics (S-1,2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Provides an intermediate study of the theory, measurement, and application of national income and employment concepts, with particular attention to the effectiveness of recent fiscal and monetary policies in achieving price stability, full employment, and sustained economic growth. Sawtelle.

ECON 203 Economic Models and Quantitative Methods (S-1,2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Introduces the basic mathematical concepts and techniques most often used in economic analysis. Uses algebra and differential calculus to develop and analyze economic models of consumer and producer behavior and of national income determination. Introduces mathematics in investment including interest, annuities, stocks, and bonds. Staff.

ECON 214 Women in the World Economy (F-1)

4 sem. hrs. Prereq.: ECON 100 and 101 or consent of the instructor.

Studies the theoretical and practical implications of considering development from the perspective of women. Feminist theories of patriarchy and gendered divisions of labor are used to reconceptualize Third World development issues. Also studies policy debates about education, health care, and reproductive rights in this light. Biewener.

ECON 216 Economic Development (F-2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Examines different theoretical approaches to development issues in the Third World and offers a general appreciation of the economic history and particular development problems of these countries. Gives attention to how different theoretical

approaches propose alternative policy recommendations for development. Biewener.

ECON 218 International Trade (F-1,2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Introduces students to international trade theory and policy with an emphasis on issues of current interest. Examines theories of why nations trade, the political economy of trade protection and strategic trade policy, debates surrounding the growth of transnational corporations, and concerns about international competitiveness. Staff.

ECON 220 International Monetary Systems (S-1,2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Introduces students to international monetary theory and policy. Examines the history and political economy of international monetary systems, the behavior of international financial markets, the balance of payments, exchange rates, international debt problems, and the role of the International Monetary Fund. Emphasizes current events throughout the course. Staff.

ECON 225 Political Economy of U.S. Capitalism (S-1,2)

4 sem. hrs. Prereq.: ECON 100 and 101 or consent of the instructor.

Examines Marxian class theory as a critical alternative to neoclassical and Keynesian theories. Investigates class theory as a systematic and critical analysis of capitalism. Critically compares class theory to mainstream theories. Examines concrete class analyses of various facets of contemporary US capitalism. Aoki.

ECON 231 Money and Banking (F-1,2)

4 sem. hrs. Prereq.: ECON 101.

Examines the US monetary and financial systems, monetary theories, and monetary policy. Surveys theories of interest rates, theories of the interaction between the economy's monetary and productive sectors, and monetary policy. Places monetary theories within the context of broad economic debates. Tracks current developments in monetary policy and financial markets, analyzing impacts on financial processes and the economy. Aoki.

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

[ECON 236 Public Economics

4 sem. hrs. Not offered in 2002-2004.] Prereq.: ECON 100.

Analyzes government spending and taxes at the national, state, and local level. Topics include growth in government, the future of the income tax in the United States, expenditure programs for the poor, financing health care and education, the Social Security system, and the relationship among various local, state, and federal governments. Staff.

ECON 239 Government Regulation of Industry (S-1)

4 sem. hrs. Prereq.: ECON 100 and 101, or consent of the instructor.

Examines the government regulation that directly guides, restricts, and overrules private decision-making in the US economy. Overview of such regulation along with in-depth analysis of such cases as pharmaceutical drug regulation, environmental protection, and electric utility regulation. Emphasizes recent trends and ongoing debates about appropriate regulation. Basch.

ECON 241 Business Competition and Antitrust Policy (F-1; S-2)

4 sem. hrs. Prereq.: ECON 100 and 101.

Analyzes the extent and nature of business competition among business firms in the US. Particularly focuses on those cases where structure and conduct are purported to deviate significantly from conditions of perfect competition. Examines antitrust policy as a means of improving the performance of American industry. Basch.

[ECON 242 Managerial Economics

4 sem. hrs. Not offered in 2002-2004.] Prereq.: ECON 100 and 101.

Examines the application of economic analysis to managerial decisions concerning output, market performance, competitive behavior, and production efficiency in profit and non-profit enterprises. Utilizes quantitative techniques appropriate to demand estimation, price determination, market share strategies, and resource allocation in cost-benefit studies of management alternatives. Sawtelle.

[ECON 247 Environmental Economics

4 sem. hrs. Not offered in 2002-2004.] Prereq.: ECON 100 and 101 or consent of the instructor.

Analyzes environmental problems and policies, with emphasis on the difficulties of measuring environmental costs and benefits. Considers pricing incentives vs. direct control approaches to regulating water pollution, air pollution, atmospheric change and acid rain, and the disposal of solid and hazardous wastes. Sawtelle.

ECON 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs. Prereq.: Consent of the department. Staff.

ECON 350 Independent Study (F-1,2; S-1,2)

4 or 8 sem. hrs. Prereq.: Consent of the department. Staff.

ECON 370 Internship (F-1,2; S-1,2)

4-16 sem. hrs. Prereq.: Senior standing and consent of the instructor.

Provides students with opportunities for workplace experience and supervised research projects that incorporate economic analysis. Basch.

[ECON 390 Special Topics in Economics

4 sem. hrs. Not offered in 2002-2004.] Prereq.: ECON 200, 201, and MATH 118 or consent of the instructor.

Intensively studies a particular area of economics using advanced analytical techniques. Intended for juniors and seniors concentrating in economics. Offered in a seminar format with a topic that varies from year to year. Staff.

ECON 393 Econometrics (F-1,2)

4 sem. hrs. Prereq.: ECON 200 and MATH 118 or consent of the instructor.

Introduces the quantitative measurement and analysis of actual economic phenomena using regression analysis. Regression techniques can be used to describe economic relationships, to test hypotheses about economic relationships, or to forecast future economic activity. Students use a computer statistical package to construct and test econometric models. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

ECON 395 Feminism and Economic Difference (S-1,2)

4 sem. hrs. Prereq.: ECON 100, 101, and junior or senior standing or consent of the instructor.

Questions the positing of a universal “utility maximizing” subject and global capitalism as structuring the terrain of economic relationships. Considers critical appraisals of economics as a gendered discourse and recent poststructuralist and materialist feminist work that diversifies the economic space by theorizing gender, class, sexuality, and race, along with economic difference. Biewener.

Department of Education and Human Services

****Paul Abraham, Director of MATESL Program, Associate Professor**

Elizabeth Fleming, Assistant Dean for Programs in Special Education, Assistant Professor

Lynda Johnson, Assistant Dean for the MAT Program, Assistant Professor

Helen Guttentag, Director of Clinical Programs and Undergraduate Education, Assistant Professor

Jill Taylor, Associate Professor and Director of Human Services Program

Maryellen Cunnion, Associate Professor

Al Rocci, Associate Professor

James Walsh, Associate Professor

Janie Ward, Associate Professor

Joy Bettencourt, Assistant Professor

Allan Blume, Assistant Professor

Ellen Davidson, Assistant Professor

Gary Oakes, Assistant Professor

Michael Cameron, Assistant Professor and Coordinator of Program in Behavioral Education

Christine Tierney, Assistant Professor, Director of Clinical Programs and Undergraduate Programs in Special Education

Chris Evans, Assistant Professor and Practicum Coordinator

Jane Hardin, Assistant Professor and Practicum Coordinator

Janet Chumley, Instructor

Stephanie Hamel, Instructor

Cheryl Koki, Instructor

Madalaine Pugliese, Instructor, Coordinator of Program in Assistive Technology

Susan Ainsleigh, Lecturer

Barbara Berberian, Lecturer

Joan Brunnick, Lecturer

Barbara Cauchon, Lecturer

Jean Chandler, Lecturer

Dan Cohen-Almeida, Lecturer

Mary Colvario, Lecturer

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Theresa Craig, **Lecturer**
 Claire Cummings, **Lecturer**
 Bert Goodrich, **Lecturer**
 Jan Goodrich, **Lecturer**
 Dan Gould, **Lecturer**
 Susan Langer, **Lecturer**
 Joan McKenna, **Lecturer**
 Margaret Metzger, **Lecturer**
 Bea Mikulecky, **Lecturer**
 Susan Plati, **Lecturer**
 Thomas Rooney, **Lecturer**
 Daryl Rynning, **Lecturer**
 Jennifer Sauriol, **Lecturer**
 Barbara Scotto, **Lecturer**
 Audrey Seyffert, **Lecturer**
 Michael Sherman, **Lecturer**
 Allan Shwedel, **Lecturer**
 Ann Steele, **Lecturer**
 Jay Sugarman, **Lecturer**
 Alice Van Deusen, **Lecturer**
 Barbara Wilson, **Lecturer**
 Alexis Boryczka, **Publications Assistant**
 Roxanne Noseworthy, **Assistant to the Assistant Dean**

Suzanne Kowalewski, **Administrative Assistant, Graduate General Education and Clinical Programs**
 Suzanne Mullarky, **Administrative Assistant, MATESI Undergraduate Education, Human Services and the Department**
 Elizabeth Smith, **Administrative Assistant, Beginning Center**
 Alexandra Hunter, **Staff Assistant, SPED**
 Nicole Pelletier, **Staff Assistant, General Graduate Education**
 Jennifer Tichon, **Special Education Off-Campus Coordinator**

***On leave academic year 2002-2003.*

The Department of Education and Human Services offers the following professional programs at the undergraduate level:

- Teacher preparation
 - General education – pages 103-111
 - English as a Second Language – page 107
 - Special education – pages 111-118
 - Kathleen Dunn Scholars (Integrated bachelor's-master's program) – pages 118-119

Preparation for work in human service agencies (major and minor) – pages 119-120
 Simmons also offers graduate programs in education. For more information, see pages 216-241.

F = Fall
 S = Spring
 U = Summer
 STC = Short-Term Course
 1 = Academic Year 2002-2003
 2 = Academic Year 2003-2004
 M = Mode

In accordance with Section 207 of Title II of the Federal Higher Education Act, all programs of teacher education need to report the pass rates of their students on statewide testing for teacher certification. The 1999-2000 program completers at Simmons College had a 99% pass rate on the Communication and Literacy section, 94% on all subject matter tests, and 100% on the Teaching to Special Populations section. Simmons's summary pass rate was 96%.

Massachusetts Tests for Educator Licensure
 Annual Institution Report

1999-2000

Test category	Simmons pass rate	Statewide passrate
Communication and Literacy	99%	89%
Academic Content Areas	94%	85%
Teaching to Special Populations	100%	95%
Summary pass rates	96%	81%

Independent Learning

Education majors can fulfill the all-College independent learning requirement through practica or EDUC 350, EDUC 388, SPED 338, SPED 339, SPED 368, or HUMV 370.

The Practica

All student teaching will take place within a fifty-mile radius of the College. Students are responsible for arranging and paying for transportation to and from schools and for making housing arrangements with the College during spring recess.

In those courses required to meet state standards, the department expects a level of academic distinction, including a cumulative grade point average of 3.00, in order to be recommended for a practicum. All students must document seventy-five hours of pre-practicum fieldwork prior to advancing to the practicum.

Practica descriptions can be found at the end of course listings for each teacher preparation program.

Teacher Preparation Programs

Note: *The programs described in this catalog apply to students graduating after October 1, 2003. The Massachusetts Department of Education has passed new regulations for certification, now known as licensure, which are in effect for all students completing programs after October 1, 2003. Students in the class of 2003 will complete their programs under the previous regulations, as described in the Simmons College 2000-2001 Catalog (pages 69-75).*

The Massachusetts state regulations for licensing may continue to change. Thus, requirements for completing education majors in preparation for licensure may also be modified as the department responds to changes in licensing regulations.

The Simmons College teacher preparation program is committed to the belief that all children can learn, thereby preparing teachers to respond to a variety of learning styles, to value diversity, and to encourage the inclusion of all learners in the classroom and the community. Graduates of the program have a strong background in the liberal arts and sciences, understand their roles as teachers in a democratic society, and are ready

to enter the profession as reflective, responsible individuals.

The program prepares teachers at the following levels and fields:

- Early childhood (grades PreK-2)
- Elementary (grades 1-6)
- Middle or high school in subject matter fields (grades 5-8 or 8-12)
- Spanish, French, or English as a second language (grades PreK-8 or grades 5-12)
- Special needs (grades PreK-8, 5-12)
- Intensive special needs (grades PreK-12)

The teacher preparation program complies with Massachusetts licensing requirements and with those of the Interstate Certification Compact, with licensing reciprocity in thirty-six states. Massachusetts requires that all candidates for licensing in all programs in education pass the Massachusetts Tests for Educator Licensure (MTEL). In order for a candidate to receive a license, that person must 1) successfully complete all course and initial licensing requirements of the Simmons program; 2) be recommended for licensure by public school and college faculty at the conclusion of the practicum; and 3) pass all appropriate sections of the MTEL. Candidates seeking out-of-state licensure may additionally be asked to take a similar examination required by that state. Department administrators are available to discuss specific licensing information.

An initial license will be awarded upon recommendation to the Commonwealth of Massachusetts after completion of a baccalaureate with a major in one of the liberal arts and sciences as well as in education. The programs below comply with the requirements of the initial license.

An integrated bachelor's and master's program is available in most areas, enabling students to complete a reduced-credit master's program during their fifth year and do a year-long internship in a public school classroom. Students applying for this program are known as Kathleen Dunn Scholars. See pages 118-119 or contact the director of undergraduate programs in general education or special education for more information.

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

A joint social studies/education major is available for students majoring in early childhood, elementary, or special education. See page 105 or contact the chair of the education or history department for further information.

BACHELOR'S PROGRAMS IN GENERAL EDUCATION AND ESL

Majors are required to complete the following sequence of courses:

- Stage I Fundamentals of Education in the Inclusive Classroom (Common Core)
- Stage II Subject Matter Field(s)
- Stage III Licensure Preparation

Stage I. Fundamentals of Education in the Inclusive Classroom (*Common Core*) (8 semester hours)

The following courses are required for all general education and ESL majors:

- *EDUC 156 Schools in an Era of Change
- *EDUC 460 Teaching Strategies for the Inclusive Classroom

**Includes fieldwork*

Students in the class of 2003 and all subsequent classes will be evaluated for writing competence at the conclusion of EDUC 156 and must be recommended by the faculty to advance to EDUC 460. Those students who have not demonstrated satisfactory literacy skills will be required to take a writing course recommended by the faculty and achieve a grade of B or better before advancing to EDUC 460. Students will again be evaluated after completion of EDUC 460. Those students who have not demonstrated strong academic and literacy skills will be offered other options and will work closely with their advisers to find a match for their child-related interests in a non-licensed field.

Stage II. Subject Matter Field(s)

All students seeking licensure must complete a major in the liberal arts or sciences as well as in education. Courses are chosen from the arts and sciences appropriate to the student's specializa-

tion. Requirements for each level are described below. Students should thus plan their liberal arts majors, College requirements, and courses to fulfill particular subject matter requirements with their education advisers.

Stage III. Licensure Preparation

Students choose curriculum and methods courses, fieldwork, and student teaching appropriate to their levels and fields of specialization as designated below.

Early Childhood Teacher (PK-2)

This program is designed for those who wish to be licensed to teach or to be licensed by the Office for Children. In addition to the Common Core, students are required to take the Stage II and Stage III courses listed to complete the education major.

Stage II. Subject Matter Core (44 semester hours)

- EDUC 108 Introduction to Early Childhood Education
- MATH 115 Mathematics for Elementary School Teachers
- PHYS/
BIOL 103 Great Discoveries in Science
- or BIOL 345 Principles of Ecology
- HIST 140 History of American Civilization I
- HIST 100 World Civilization I
- NUTR 111 Fundamentals of Nutrition Science
- PSYC 101 Introduction to Psychology
- PSYC 235 Developmental Psychology
- PSYC 335 Social and Emotional Development
- or SPED 346 Learners with Special Needs
- ENGL 313 Survey of Literature for Children and Young Adults
- One Art or Music course chosen with adviser

F = Fall
 S = Spring
 U = Summer
 STC = Short-Term Course
 1 = Academic Year 2002-2003
 2 = Academic Year 2003-2004
 M = Mode

Stage III. Licensure Preparation (32-36 semester hours)

The required courses for Stage III are:

EDUC 381	Practicum in Early Childhood: PreK
EDUC 386	Practicum in Early Childhood: K-2 (8 semester hours)
EDUC 308	Seminar in Teaching and Learning at the Early Childhood and Elementary Levels
EDUC 462	Curriculum for the Early Childhood Classroom
EDUC 464	Reading and Language Arts for the Early Childhood and Elementary Classroom
EDUC 467	Math for the Early Childhood and Elementary Classroom

Strongly recommended:

EDUC 324	Integrating Educational Technology in the Classroom
----------	--

Early Childhood Minor (20 semester)hour

Students who are interested in exploring human services or pre-school teaching but don't wish to be eligible for state licensure might choose to minor in early childhood. Dunn Scholars (see pages 118-119) might also do a minor and complete their licensure preparation at the graduate level during their fifth year.

EDUC 108	Introduction to Early Childhood Education
EDUC 156	Schools in an Era of Change
EDUC 460	Teaching Strategies for the Inclusive Classroom
EDUC 462	Curriculum for the Early Childhood Classroom
SPED 346	Learners with Special Needs

Elementary Teacher (Grades 1-6)

In addition to the Common Core, students must also complete the following courses in Stage II and Stage III for the major in education and to meet state regulations.

Stage II. Subject Matter Field (48 semester hours)

English: One course in world literature and one course in American literature

Mathematics:

MATH 115 Mathematics for Elementary
Teachers

or MATH 118 Statistics (for Psychology majors)

History and Social Studies:

HIST 140 History of American Civilization I

HIST 100 World Civilization I

HIST 101 World Civilization II

POLS 101 Introduction to American Politics

Science and Technology Engineering:

Two of the following:

BIOL 113 General Biology

PHYS/BIOL 103 Great Discoveries in Science

PHYS 105 How Things Work

Child Development:

PSYC 101 Introduction to Psychology

PSYC 235 Developmental Psychology

Art/Music: One course chosen with adviser

Stage III. Licensure Preparation

(28-32 semester hours)

The following courses are required:

EDUC 308	Seminar in Teaching and Learning at the Early Childhood and Elementary Levels Taken concurrently with EDUC 382.
EDUC 382	Practicum: Elementary School (Grades 1-6) (12 semester hours)
*EDUC 461	Social Studies, Science and the Arts in the Elementary Classroom
*EDUC 464	Reading and Language Arts for the Early Childhood and Elementary Classroom
*EDUC 467	Math for the Early Childhood and Elementary Classroom

**Includes fieldwork*

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004

Strongly recommended:

EDUC 324 Integrating Educational
Technology in the Classroom

Elementary Minor (20 semester hour)

Dunn Scholars (see pages 118-119) might choose to do a minor and complete their licensure preparation at the graduate level during their fifth year.

*EDUC 156 Schools in an Era of Change

*EDUC 346 Learners with Special Needs
or other appropriate special
education course

*EDUC 460 Teaching Strategies for the
Inclusive Classroom

*EDUC 461 Social Studies, Science and
the Arts in the Elementary
Classroom

or *EDUC 464 Reading and Language Arts
for the Early Childhood and
Elementary Classroom

or *EDUC 467 Math for the Early Childhood
and Elementary Classroom

One additional education course

or HUMV 137 Growth and Change in
Individuals and Families

or ENGL 313 Survey of Literature for
Children and Young Adults

**Includes fieldwork.*

Joint Social Studies/Education Major (36 semester hour)

This joint major is designed for elementary, early childhood, and special education majors. Courses selected offer the best preparation for the social studies curriculum now mandated by the Massachusetts Curriculum Frameworks and taught in public school classrooms and are designed to prepare candidates for the MTEL now required of all teacher candidates.

Students should work closely with their advisers in the education and history departments to plan a course of study. In addition to the courses prescribed in the joint major, students should take courses to complete the subject matter core

required for licensing (Stage II) as well as courses that fulfill the College requirements.

Students who plan to pursue the five-year bachelor's-master's program will have more flexibility in course selection and electives.

American History (8 semester hours):

HIST 140 History of American
Civilization I

or HIST 241 Colonial America

**One US history course above the 100 level that includes material from the twentieth century

World Civilization (8 semester hours):

HIST 100 World Civilizations I

or HIST 222 Greek and Roman History
and

**One non-US history course that focuses on a period of history since the Renaissance. Courses will be selected in consultation with an adviser in the education department.

Economics (8 semester hours):

ECON 100 Principles of Microeconomics

ECON 101 Principles of Macroeconomics

Political Science (8 semester hours):

POLS 101 Introduction to American
Politics

POLS 222 Maps and Marauders: Political
Geography

Depth (4 semester hours):

One course above the 100 level, chosen from history or political science and international relations

** See advising form in the education department for possible course options.

Note: Many of the courses in this major include courses in the subject matter core and the modes of inquiry.

Middle School Tier (Grades 5-8) in Subject Matter Fields

or

F	=	Fall
S	=	Spring
U	=	Summer
STC	=	Short-Term Course
1	=	Academic Year 2002-2003
2	=	Academic Year 2003-2004
M	=	Mode

High School Teacher (Grades 8-12) in Subject Matter Fields

or

Teacher of Spanish, French or English as a Second Language (Grades 5-12)

Students preparing to teach at the middle school or high school level must double major in education and in a subject matter area taught in public schools. In addition to Common Core, students are required to take the following courses in Stage II and Stage III.

Stage II. Subject Matter Field(s)

Special subject teachers at the high school and middle school levels must complete the requirements for a major in their subject matter fields. In some areas, additional specific courses are required by state regulations. Students must consult with an adviser in the Department of Education and Human Services while planning their academic major.

Teacher of biology A major in biology is required.

Teacher of chemistry A major in chemistry is required.

Teacher of English A major in English is required.

Teacher of English as a second language A major in English or another modern language is recommended, but other liberal arts majors are possible. Note, however, that competence in a modern language at or above the intermediate level is required. Required ESL subject matter includes the following courses:

ML 310	Introduction to Linguistics and English Grammar
TESL 451	Bilingualism and Language Variation in Multicultural Settings
TESL 479	Teaching English as a Second Language Methodology and Curriculum Development

See page 107 for more details about English as a second language.

Teacher of history A major in history is required.

Teacher of modern world language A major in a modern language other than English is required. Twenty semester hours must be above the intermediate level, and advanced composition and conversation, linguistics, and theories of first and second language acquisition must be included. Students must demonstrate fluency as determined by the Department of Modern Languages and Literature before student teaching. In addition, Massachusetts licensure requires a demonstration of proficiency at or above the advanced level according to ACTFL/ILR guidelines.

Teacher of mathematics A major in mathematics is required.

Teacher of political science (must be known as social studies) A major in political science is required.

All students majoring in a secondary subject matter should consult the *General Education Undergraduate Advising Handbook* for specific additional courses required beyond their majors to meet state subject matter requirements. Students should work closely with their advisers in selecting courses.

Stage III. Licensure Preparation (28-32 semester hours)

The following courses are required:

PSYC 236	Psychology of Adolescence
EDUC 310	Seminar in Teaching and Learning at the Middle and High School Level. Taken concurrently with EDUC 383, EDUC 384, and EDUC 385.
EDUC 383	Practicum: Middle School (Grades 5-8) (12 semester hours)
or EDUC 384	Practicum: High School (Grades 8-12) (12 semester hours)
or EDUC 385	Practicum: French, Spanish, ESL (Grades 5-12) (12 semester hours)
*EDUC 455	Issues in Teaching and Learning for Middle and High School Teachers

F =
Fall
S =
Spring
U =
Summer
STC =
Short-Term Course
1 =

*EDUC 471-478 A course in curriculum of specific subject areas in middle and high school.

Strongly recommended:

EDUC 324 Integrating Educational Technology in the Classroom

* *Includes fieldwork*

Middle/High Schools Minor (20 semester hour)

Dunn Scholars (see pages 118-119) might minor in education and complete their licensure preparation at the graduate level during their fifth year.

*EDUC 156 Schools in an Era of Change

*SPED 346 Learners with Special Needs

or other appropriate course in special education

*EDUC 455 Issues in Teaching and Learning for Middle and High School Teachers

*EDUC 460 Teaching Strategies for the Inclusive Classroom

HUMV 137 Growth and Change in Individuals and Families

or another education course

* *Includes fieldwork*

English as a Second Language (5-12)

The Program in English as a Second Language prepares teachers to work with non-native English speakers in public schools in self-contained and pull-out classrooms at middle and high school levels. This program should be taken concurrently with a major in one of the liberal arts or sciences. A strong background in a second language and culture is necessary, and a semester abroad is strongly encouraged.

First Year

Modern language (101, 102, or appropriate level)

PSYC 101 Introduction to Psychology

EDUC 156 Schools in an Era of Change

Sophomore Year

Modern language (201, 202, or appropriate level)

PSYC 236 Psychology of Adolescence

EDUC 460 Teaching Strategies for the Inclusive Classroom.

Junior Year

Modern language (240, 245, or appropriate level)

TESL 479 TESL Methodology and Curriculum Development

*ML 310 Introduction to Linguistics and English Grammar

Senior Year

TESL 451 Bilingualism and Language Variation in Multicultural Settings

EDUC 385 Provisional Practicum: French, Spanish, ESL (Grades 5-12)

* *Includes fieldwork*

F = Fall
 S = Spring
 U = Summer
 STC = Short-Term Course
 1 = Academic Year 2002-2003
 2 = Academic Year 2003-2004
 M = Mode

COURSES IN GENERAL EDUCATION

EDUC 108 Introduction to Early Childhood Education (F-1,2)

4 sem. hrs.

Provides a comprehensive view of early childhood education with particular focus on the critical examination of models of effective early childhood programs and practices. Emphasizes the social contexts of the education of young children, with attention to the role of culture, families, peers, play, and social behaviors. Examines specific programs and models of early childhood education. Requires site visits. Staff.

EDUC 135 Handicapping Conditions: Needs, Laws, and Rights (S-1,2)

4 sem. hrs.

Provides an overview of major areas of mental and physical disability and explores current issues facing citizens with disabilities. Includes a survey of handicapping conditions, a history of the treatment of individuals with disabilities, recent legislation and litigation, the principle of normalization, and mainstreaming. Intended for those entering fields related to management, health, and/or service areas. Van Deusen.

EDUC 156 Schools in an Era of Change (M5)
(F-1,2; S-1,2)

4 sem. hrs.

Engages students in a range of issues and ideas that are part of the American educational scene, including schools as social organizations, special education, the role of technology in teaching, standardized testing, the philosophy and history of education, and the search for instructional excellence and equity in education. Requires fieldwork and computer use. Staff.

[EDUC 202 School Culture: Writing, Research, and Reflection

4 sem. hrs. Prereq.: EDUC 156. Not offered in 2002-2004.]

Examines school culture and its impact on school changes. Combines theoretical descriptions of school culture with field site observations about how school culture functions and how change does or does not take place. Uses in-class reporting and discussion along with intensive writing assignments to assist students in the development of critical thinking and writing skills. Oakes.

EDUC 308 Seminar in Teaching and Learning at the Early Childhood and Elementary Level (S-1,2)

4 sem. hrs.

Applies theoretical knowledge of pedagogy and developmental learning to develop lesson plans, integrated curriculum units, and intervention plans for individual learners needing academic or behavioral modifications. Addresses legal and ethical issues, classroom management, communication with parents, and assessment. Reviews professional portfolios. Taken in conjunction with the spring practicum. Guttentag.

EDUC 310-2 Seminar in Teaching and Learning at the Middle and High School Level (S-1,2)

4 sem. hrs.

Applies theoretical knowledge of pedagogy and developmental learning to develop lesson plans, integrate curriculum units, and consider models of effective classroom management. Focuses on appropriate assessment procedures and adapting curriculum to provide for individual differences. Also addresses effective parent communication, legal and

ethical issues, and professional portfolio development. Taken in conjunction with the spring practicum. Rocci, Rooney.

EDUC 324 Integrating Educational Technology in the Classroom (F-1,2)

4 sem. hrs. Prereq.: Stage I.

Emphasizes understanding the role of technology as a teaching tool within the broader concept of curriculum development. Explores how computer technology can provide new avenues of learning in heterogeneous classrooms. Provides tools to evaluate software, develop lessons using the Internet, use digital cameras and scanners, and explore programs such as Hyperstudio and Inspiration. Involves a major curriculum project integrating a range of technologies. Oakes, Plati.

EDUC 349 Directed Study (F-1,2; S-1,2)

4 sem. hrs.

Staff.

EDUC 350 Independent Study (F-1,2; S-1,2)

4 sem. hrs.

Staff.

TESL 451 Bilingualism and Language Variation in Multicultural Settings (F-1,2)

4 sem. hrs.

Examines language policy, minority language rights, and linguistic and political issues affecting bilingual education in a multicultural context. Investigates the effects of gender, race, and culture on language use within developmental stages and learning styles of students across grade levels. Emphasizes assessment procedures and the involvement of parents in education. Chumley.

EDUC 455 Issues in Teaching and Learning for Middle and High School Teachers (F-1,2; S-1,2)

4 sem. hrs.

Considers professional issues for middle and high school teachers and students, including current school reform efforts; the multicultural debate; and other issues of race, gender, and sexual orientation. Examines the effect of school culture and the influence of television. Requires fieldwork if not taken concurrently with subject area methods course. Rocci.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

EDUC 460 Teaching Strategies for the Inclusive Classroom (F-1,2; S-1,2)

4 sem. hrs. Prereq.: EDUC 156 and consent of the department. Not open to first-year students.

Examines a variety of teaching strategies applicable to students in heterogeneous classrooms: techniques to individualize instruction and promote mastery learning, development of cooperative learning strategies, and consideration of specific classroom and behavior management procedures. Requires fieldwork. Bettencourt, Gersten, Johnson, Senatore.

EDUC 461 Social Studies, Science, and the Arts in the Elementary Classroom (S-1,2)

4 sem. hrs. Prereq.: Stage I.

Considers methods and materials for elementary curriculum in social studies, science, music, and art, emphasizing the unit approach to curriculum organization. Incorporates audiovisual materials. Examines experimental models and techniques of observation. Requires field experience in an inclusive classroom or a museum setting. Sugarman.

EDUC 462 Curriculum for the Early Childhood Classroom (S-1,2)

4 sem. hrs. Prereq.: Stage I and two courses in child development.

Explores early childhood programming (birth through age eight), focusing on the importance of physical, emotional, and cognitive development. Emphasizes adapting materials and methods to the needs of each child, including those with special needs. Discusses room arrangement and adaptations, equipment uses, sensory and creative experiences, dramatic play, and curriculum. Requires participation in workshops and field placement. Staff.

EDUC 464 Reading and Language Arts for the Early Childhood and Elementary Classroom (F-1,2)

4 sem. hrs. Prereq.: Stage I.

Considers methods of assessment and instruction in creating balanced reading programs: pre-reading skills, decoding strategies, oral reading, and comprehension skills. Examines grouped and individualized teaching formats. Discusses children's literature, poetry, and the writing process, along with strategies for modifying curriculum and instruction for special needs learners. Requires two mornings per week of

fieldwork if taken concurrently with EDUC 367. Guttentag, Scotto, Sullivan.

EDUC 467 Math for the Early Childhood and Elementary Classroom (F-1,2)

4 sem. hrs. Prereq.: Stage I.

Considers basic topics of elementary mathematics from contemporary viewpoints to reinforce mathematics learning. Examines varying pupil responses and techniques of instruction and construction of curriculum units. Requires field experience in an inclusive classroom. Includes two mornings a week of fieldwork if taken concurrently with EDUC 364. Davidson, Hamel.

EDUC 471 English Curriculum at the Middle or High School Level (F-1,2)

4 sem. hrs. Prereq.: Stage I.

Considers issues in the teaching of high school and middle school English, including selection and justification of content, models of curriculum design, lesson and unit planning, history and structure of English language, and language acquisition theories. Includes observation and aiding experiences in inclusive English classrooms. Metzger, Colvario, Fisher.

EDUC 472 Modern Foreign Language Curriculum at the High School or Middle School Level (F-1,2)

4 sem. hrs. Prereq.: Stage I and one course in advanced composition or stylistics.

Considers major pedagogical issues in modern language instruction with specific attention to theories of language acquisition; the development of listening, speaking, reading, and writing skills; selection and justification of content; models of curricular design; and construction of lesson plans and units. Includes observation and aiding experiences in inclusive language classrooms. Wohlers.

EDUC 474 History and Political Science Curriculum at the High School or Middle School Level (F-1,2)

4 sem. hrs.

Considers major pedagogical issues in teaching history and the social sciences, emphasizing selection and justification of content, models of curriculum design, modes of inquiry, and construction of lesson plans and units. Includes observation and aiding

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

experiences in inclusive social studies classrooms. Chaet, Bettencourt.

EDUC 476 Science Curriculum at the High School or Middle School Level (F-1,2)

4 sem. hrs.

Introduces middle and high school science teaching: specific problems, instructional materials, and teaching techniques. Emphasizes observing and aiding inclusive science classes. Cauchon, Plati.

EDUC 478 Mathematics Curriculum at the High School or Middle School Level (F-1,2)

4 sem. hrs.

Explores contemporary issues and problems in middle and high school level mathematics teaching, including curriculum projects and materials and their origins, rationales, and uses. Emphasizes the teacher's role as a generator of knowledge and curriculum and the formulator of instruction. Includes appropriate field experience. Sherman, Norris.

TESL 479 Teaching English as a Second Language Methodology and Curriculum Development (S-1,2)

4 sem. hrs.

Introduces students to teaching English as a second language. Offers an overview of the history of second language teaching, methodologies, approaches, and techniques and their underlying theories and assumptions. Examines specific classroom techniques – reading and writing processes and instruction and assessment and testing – and their application to curriculum development. Requires fieldwork. Abraham.

ML 310 Introduction to Linguistics and English Grammar (S-1,2)

4 sem. hrs.

Examines phonological, morphological, lexical, syntactic, and historical issues for TESL or anyone interested in English language. Involves tutoring a non-native speaker for a view of English grammar from the learner's perspective and synthesizing teaching points and strategies. Chumley.

GENERAL EDUCATION PRACTICUM

In addition to the requirements on page 102, general education students must pass the Communication and Literacy sections of the MTEL in order to advance to their senior year final professional courses.

EDUC 381 Practicum in Early Childhood: PreK (U-1,2)

4 sem. hrs. Prereq.: Consent of the department.

Requires 150 hours in a PreK level setting including special needs learners. Includes supervised teaching responsibilities and development of lesson plans, curriculum materials, and learning centers. Taken in Summer Session I following junior year. Staff.

EDUC 382 Practicum: Elementary School (Grades 1-6) (S-1,2)

12 sem. hrs. Prereq.: Consent of the department.

Assigns supervised teaching responsibilities in an inclusive elementary classroom in the metropolitan Boston area. Includes planning and implementing daily class lessons, developing curriculum materials, and demonstrating service to students who fall short of classroom instructional objectives. Requires papers and weekly seminars. Guttentag.

EDUC 383 Practicum: Middle School (Grades 5-8) (S-1,2)

12 sem. hrs. Prereq.: Consent of the department.

Assigns supervised teaching responsibilities in an appropriate inclusive middle school classroom in the metropolitan Boston area. Includes planning and implementing daily class lessons, developing curriculum materials, and demonstrating service to students who fall short of classroom instructional objectives. Requires papers and weekly seminars. Guttentag.

EDUC 384 Practicum: High School (Grades 8-12) (S-1,2)

12 sem. hrs. Prereq.: Consent of the department.

Assigns supervised teaching responsibilities in an appropriate inclusive high school classroom in the metropolitan Boston area. Includes planning and implementing daily class lessons, developing curriculum materials, and demonstrating service to students who fall short of classroom instructional objectives. Requires papers and weekly seminars. Guttentag.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

EDUC 385 Practicum: French, Spanish, ESL (Grades 5-12) (S-1,2)

12-16 sem. hrs. Prereq.: Consent of the department. Assigns supervised teaching responsibilities in an inclusive French, Spanish, or ESL classroom in the metropolitan Boston area. Includes planning and implementing daily class lessons, developing curriculum materials, and demonstrating service to students who fall short of classroom instructional objectives. Requires papers and weekly seminars. Chumley.

EDUC 386 Practicum in Early Childhood: K-2 (S-1,2)

12 sem. hrs. Assigns supervised teaching responsibilities in an inclusive K-2 classroom in the metropolitan Boston area. Includes planning and implementing daily class lessons, developing curriculum materials, and demonstrating service to students who fall short of classroom instructional objectives. Requires papers and weekly seminars. Guttentag.

EDUC 388 Seminar and Fieldwork in Education (F-1,2; S-1,2)

8-16 sem. hrs. Prereq.: Consent of the department. Limited enrollment. Emphasizes alternative career choices in education. Guttentag.

BACHELOR PROGRAMS IN SPECIAL EDUCATION

In the field of special education, Simmons College offers training for Massachusetts licensure for Teacher of Students with Moderate Disabilities (PreK-8 or 5-12) and Teacher of Students with Severe Disabilities (Levels: All). Students who select one of these programs must also have a major in the liberal arts or sciences. The Massachusetts regulations for licensure in the field of special education are changing. Students must meet with advisers in special education to review their course selections.

In accordance with state requirements, the Simmons programs in special education are competency based. For this reason, transfer credit for coursework completed at other institutions will not be granted automatically. Competency in

coursework completed elsewhere will be evaluated by the Simmons departmental faculty.

Special Education – ~~Psychology~~

A five-course sequence leading to a certificate in applied behaviour analysis is available from the Department of Education for psychology students interested in using this technique to work with children and families in educational or home settings. For further information, contact Michael Cameron, coordinator of the program in behavioral education, or Barbara Gentile, Department of Psychology.

Moderate Disabilities (PreK-8 or 5-12)

This concentration prepares teachers in inclusive education to work with learners with moderate disabilities in grades PreK-8 or 5-12, emphasizing collaborative consultation, general education classroom accommodations, curriculum strategies, and family involvement. The program responds to today's critical need to train personnel in public and private schools and residential programs to teach learners with moderate disabilities and to implement a philosophy of inclusion in all settings.

Moderate Disabilities Major (PreK-8 or 5-12) (44-48 semester hours):

The usual sequence of courses is as follows:

First and Sophomore Years

- PSYC 101 Introduction to Psychology
- PSYC 235 Developmental Psychology
- *SPED 346 Learners with Special Needs

Junior Year

- *SPED 343 Issues in the Education of Learners with Special Needs
- *SPED 302 Strategies for Teaching Learners with Moderate Disabilities (PreK-8): Math and Science
- or *SPED 304 Strategies for Teaching Learners with Moderate Disabilities (5-12): Math and Science

F = Fall
 S = Spring
 U = Summer
 STC = Short-Term Course
 1 = Academic Year 2002-2003
 2 = Academic Year 2003-2004
 M = Mode

- Senior Year
SPED 311 Prepracticum Seminar:
Moderate Disabilities (PreK-8
or 5-12)
*No fee/no credit. Meets weekly with the
graduate moderate disabilities seminar.*
- *SPED 301 Strategies for Teaching Learners
with Moderate Disabilities
(PreK-8): Reading and
Language Arts and Social
Studies
- or *SPED 303 Strategies for Teaching Learners
with Moderate Disabilities (5-
12): English and Social Studies
- *SPED 336 Formal and Informal
Assessment
- *SPED 341 Classroom Management for
Learners with Special Needs in
Inclusive Settings
- SPED 338 Practicum: Moderate
Disabilities (PreK-8), (12-16
semester hours)
- or SPED 339 Practicum: Moderate
Disabilities (5-12), (12-16
semester hours)

**Includes fieldwork.*

Students completing a concentration in moderate disabilities (PreK-8 or 5-12) at the undergraduate level will be eligible for Massachusetts Department of Education provisional or initial licensure as Teacher of Students with Moderate Disabilities (PreK-8 or 5-12) after all Massachusetts Department of Education prerequisites have been satisfied.

Moderate Disabilities (PreK-8 or 5-12)
Minor – Sample (20 semester hours)

Students pursuing a minor in moderate disabilities must elect five courses from the selection below.

- SPED 301 Strategies for Moderate
Disabilities (PreK-8): Reading
and Language Arts and Social
Studies
- or SPED 303 Strategies for Teaching Learners
with Moderate Disabilities (5-

- 12): English and Social Studies
- SPED 302 Strategies for Moderate
Disabilities (PreK-8): Math
and Science
- or SPED 304 Strategies for Teaching Learners
with Moderate Disabilities
(5-12): Math and Science
- SPED 341 Classroom Management for
Learners with Special Needs
in Inclusive Settings
- SPED 343 Issues in the Education of
Learners with Special Needs
- SPED 346 Learners with Special Needs

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

Severe Disabilities (Levels: All)

The Severe Disabilities (Levels: All) concentration prepares students to work with learners with severe or intensive disabilities in inclusive general education classrooms, in self-contained special education classes in general public schools, or in special residential or day schools. Students are also trained to support the inclusion of students with severe disabilities into the community, school, and workplace. Students are prepared to teach age-appropriate skills to learners in pre-school, elementary, middle, and high school settings and will have field experiences at different levels. The skills range from communication, self-help, and social behavior to survival reading, simple computation, and specific job skills.

Severe Disabilities Major (Levels: All)
(44-48 semester hours):

The usual sequence of courses is as follows:

First and Sophomore Years

- PSYC 101 Introduction to Psychology
PSYC 235 Developmental Psychology
*SPED 346 Learners with Special Needs

Junior Year

- *SPED 342 Analysis of Behavior: Principles
and Classroom Applications
*SPED 343 Issues in the Education of
Learners with Special Needs
*SPED 347 Assessment and Curriculum

Development for Learners with Severe Disabilities

Senior Year

*SPED 301

Strategies for Teaching Learners with Moderate Disabilities (PreK-8): Reading and Language Arts and Social Studies

SPED 311

Prepracticum Seminar: Severe Disabilities (Levels: All)
No fee/no credit. Meets weekly with the graduate severe disabilities seminar.

*SPED 348

Analysis of Community Resources and Development of the Trainer Advocate Role

SPED 368

Practicum: Severe Disabilities (Levels: All) (12-16 semester hours)

**Includes fieldwork*

Students who concentrate in severe disabilities at the undergraduate level are eligible for Massachusetts Department of Education provisional or initial licensure as Teacher of Severe Disabilities (Levels: All) after all Massachusetts Department of Education prerequisites have been satisfied.

Severe Disabilities Minor (Levels: All)

Students pursuing a minor in severe disabilities must elect five courses from the selection below.

SPED 342

Analysis of Behavior: Principles and Classroom Applications

SPED 343

Issues in the Education of Learners with Special Needs

SPED 346

Learners with Special Needs

SPED 347

Assessment and Curriculum Development for Learners with Severe Disabilities

SPED 348

Analysis of Community Resources and Development of the Trainer Advocate Role

Open Minor

Students may pursue an open minor in special education by passing any five courses in the programs in special education.

COURSES IN SPECIAL EDUCATION

**Scheduled to be announced. Please contact the special education program for further information.*

*SPED 301 Strategies for Teaching Learners with Moderate Disabilities (PreK-8): Reading and Language Arts and Social Studies
4 sem. hrs.

Focuses on identifying and developing appropriate strategies to meet the needs of diverse learners with moderate disabilities in reading, language arts, and social studies from preschool to grade eight. Applies instructional strategies and curricular adaptations most effective in the general education setting. Includes decoding and basic literacy skills. Requires fieldwork. Wilson, Koki, Goodrich.

*SPED 302 Strategies for Teaching Learners with Moderate Disabilities (PreK-8): Math and Science
4 sem. hrs.

Focuses on developing curricula and alternative instructional strategies for mathematical and scientific thinking, computation, and problem solving processes to help meet the special needs of diverse learners with moderate disabilities in inclusive settings from preschool to grade eight. Requires fieldwork. Goodrich.

*SPED 303 Strategies for Teaching Learners with Moderate Disabilities (5-12): English and Social Studies
4 sem. hrs.

Focuses on appropriate strategies in reading and writing to meet the needs of diverse learners with moderate disabilities in English and social studies in grades five to twelve and applies instructional strategies and curricular adaptations in content area classrooms within the general education settings. Focuses on study skills, reading comprehension, and writing skills necessary for success in inclusive English and social studies classrooms. Requires fieldwork. Koki, Goodrich.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

*SPED 304 Strategies for Teaching Learners with Moderate Disabilities (5-12): Math and Science
4 sem. hrs.

Focuses on developing curricula and alternative instructional strategies for mathematical and scientific thinking, computation, and problem-solving processes to meet the special needs of diverse learners with moderate disabilities in appropriate classes in grades five to twelve. Emphasizes effective techniques in inclusive classrooms. Requires fieldwork. Goodrich.

*SPED 305 Phonemic Awareness: A Key to Developing Literacy for All Ages
4 sem. hrs.

Provides training in advanced techniques for teaching reading, focusing on auditory discrimination and multisensory learning. Uses assessment to identify individuals with poorly developed phonemic awareness. Staff.

*SPED 306 The Structure of Language for Teachers I
4 sem. hrs.

Provides an overview of the structure of the language and methods to teach reading and spelling through multisensory and associative teaching techniques. Progresses in a sequential, systematic, hierarchical order to cover phonemes, graphemes, and patterns of English. Includes morphological (rules for the addition of prefixes and suffixes) and syntactical structure. Moats.

*SPED 312 Including Learners with Special Needs
4 sem. hrs.

Explores building-based issues in the inclusion of learners with special needs and techniques, including cooperative learning, to include learners with special needs in general educational settings. Includes development of a collaborative plan describing implementation strategies for inclusion, team building, and school change. Requires site visit. Fleming.

*SPED 313 Creating Inclusive School Communities
2-4 sem. hrs.

Examines models and ways to create an inclusive school community. Includes support networking,

classroom-focused support options, and strategies to build caring and effective schools. Requires development of an ideal team model, design and presentation of a workshop, and contribution to a publication for effective inclusion strategies. Fleming.

*SPED 314 Classroom Methods of Manual Communication
4 sem. hrs.

Introduces beginning level manual communication (signing and finger spelling) and other alternative and augmentative communication systems and strategies for learners with special needs. Emphasizes American Sign Language and includes other Manually Coded English systems, as well as augmentative communication systems and strategies, related literature, and related technology. Craig.

*SPED 322 Using Computers to Include Learners with Special Needs
4 sem. hrs.

Explores strategies to incorporate assistive technology into classrooms and learners' individualized educational programs. Provides real-world experiences, resources and skill development in the latest software, adaptive equipment, and best practices. Explores readily implemented practical solutions for inclusive classrooms. Pugliese.

*SPED 323 Individualizing Curriculum and Alternate Assessment Strategies for Learners with Special Needs

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Explores how multimedia can serve to create software activities to adapt the curriculum and for making portfolio templates that document learning. Uses authoring technologies to create custom lessons and to design electronic portfolios for performance-based authentic assessment. Designs alternate assessment methods to show what individual learners achieve, along with customized rubrics. Pugliese.

*SPED 324 Behavior Analysis in Behavioral Education
2-4 sem. hrs.

Reviews the definition and characteristics of applied behavior analysis. Teaches the fundamental principles

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

of behavior that provide the framework for instructional programming. Fleming.

*SPED 325 Cooperative Learning Strategies
2 sem. hrs.

Focuses on methods for systematically using cooperative learning strategies. Teaches how to organize and instruct heterogeneously grouped students to facilitate positive peer interactions and to increase academic skills. Focuses on implementation to facilitate mainstreaming of learners with special needs. Fleming.

*SPED 326 Behavioral Assessment
4 sem. hrs.

Focuses on the identification of functional relationships and the evaluation of interventions from information gained through behavioral assessment. Teaches conduct descriptive analyses and how to systematically manipulate variables to demonstrate functional relationships between the educational environment and behavior. Staff.

*SPED 327 Methodologies for Changing Behavior
4 sem. hrs.

Explores strategies to establish, strengthen, and weaken target behaviors. Emphasizes the generalization and maintenance of established behavioral repertoires. Cameron, Ainsleigh.

*SPED 328 Teaching of Writing
4 sem. hrs.

Addresses the effect of weaknesses in receptive and expressive language, organization, memory, and visual coordination on written production. Includes concrete teaching techniques, graphic organizers, and teaching of text structures. Wilson.

*SPED 329 Language Development and Disorders
4 sem. hrs.

Explores the components of typical and atypical language development across the linguistic domains: phonology, morphology, semantics, syntax, and pragmatics. Examines the behavioral manifestations associated with language disorders and their impact on academic functioning, particularly written language skills. Includes formal and informal evaluative procedures. Bashir.

*SPED 330 Legal and Ethical Issues
4 sem. hrs.

Reviews legal and ethical responsibilities to learners with special needs and their families, focusing on ethical considerations such as the learner's dignity. Familiarizes students with the legal and regulatory requirements of the state or agency providing services. Cameron.

*SPED 331 Crisis Management
2-4 sem. hrs.

Teaches students to define an emergency situation, understand the role and function of emergency procedures, and state the essential components and precautions for managing emergency conditions. Staff.

*SPED 332 Reading Assessment
4 sem. hrs.

Provides experience in administering and interpreting data obtained from formal and informal reading assessments and integrating this information with data from other sources to develop specific recommendations for appropriate reading/written language curricula to enhance reading/spelling/writing. Incorporates appropriate software for diagnosis and remediation. Felton.

*SPED 336 Formal and Informal Assessment
4 sem. hrs.

Involves observation, analysis, and interpretation of children's learning needs, utilizing formal and informal assessment devices in order to write, implement, and evaluate individualized educational programs. Reviews test instruments and current issues in assessment. Requires weekly fieldwork in an integrated setting. Brunnick.

*SPED 337 Data Collection, Display, and Interpretation
4 sem. hrs.

Reviews methods for obtaining data on operationally defined target behaviors. Teaches how to visually display quantitative data, interpret data, and make data-based decisions about program interventions. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

***SPED 341 Classroom Management for Learners with Special Needs in Inclusive Settings**

4 sem. hrs.

Focuses on the basic principles and approaches for the effective management of behavior for learners with special needs. Emphasizes preventive discipline, classroom environments and techniques effective with learners with diverse needs and abilities, and strategies for behavior management in multicultural settings. Staff.

***SPED 342 Analysis of Behavior : Principles and Classroom Applications**

4 sem. hrs.

Introduces behavior modification and operant techniques, including clarification of more commonly used terms, with specific reference to application in the classroom. Provides overview of procedures and practices successful in schools, communities, and work settings. Requires fieldwork. Ainsleigh, Langer.

***SPED 343 Issues in the Education of Learners with Special Needs**

4 sem. hrs.

Focuses on the historical, philosophical, legal, and ethical perspectives of educational services for learners with special needs. Reviews exemplary programs, relevant current literature, state and federal laws, development of an IEP, and case studies. Requires fieldwork. Blume.

***SPED 345 Advanced Applied Behavior Analysis**
4 sem. hrs. Prereq.: SPED 344 and consent of the department.

Reviews general issues regarding the selection of behavior change procedures. Teaches how to transfer technology to teachers in private and public settings and to the families of learners with special needs. Cameron.

***SPED 346 Learners with Special Needs**

4 sem. hrs.

Explores major areas of special needs and examines issues unique to the delivery of service to learners with special needs, including assessment strategies, equipment adaptation, materials, and parent/professional relations. Focuses on language development and communication problems. Requires fieldwork. Evans, Hardin.

***SPED 347 Assessment and Curriculum Development for Learners with Severe Disabilities**

4 sem. hrs.

Examines curriculum development, assessment techniques, and teaching/learning procedures to plan instructional programs in major life skills areas. Emphasizes analyzing functional tasks and developing individualized educational programs for implementation in general education classrooms and settings. Requires fieldwork. Ainsleigh.

***SPED 348 Analysis of Community Resources and Development of the Trainer Advocate Role**
4 sem. hrs.

Examines employment opportunities and support services available to citizens with severe disabilities. Involves job inventories in local industry and analysis of the prerequisite skills in such areas as functional academics, language, hygiene, motor skills, interpersonal skills, transportation, and money management. Includes placement and supervision of learners in worksites. Requires fieldwork. Ainsleigh, Cohen-Almeida.

***SPED 349 Directed Study**

2-4 sem. hrs.

Staff.

***SPED 350 Independent Study**

2-4 sem. hrs.

Staff.

***SPED 452 Understanding the Brain and Brain Injury**

4 sem. hrs.

Provides a comprehensive overview of the brain and brain injury from an educational and neurorehabilitation perspective. Includes basic neuroanatomy, brain behavior relationships, and the impact of acquired brain injury on school age learners. Prepares professionals to better understand the needs of children and adolescents with acquired brain injuries, to develop and implement educational and neurorehabilitation programs for these students, and to help these students and their families in their ongoing recovery. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

***SPED 453 Technology for Language and Cognitive Development**

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Teaches software selection strategies and examines an extensive collection gathered to create a supportive learning environment for learners with developmental delay. Involves long-range plans to address computer-based needs for learners of developing skills. Includes use of developmentally appropriate access devices and authoring tools to design learning along a continuum of language and cognitive development. Staff.

***SPED 454 Multimedia in Special Education**

4 sem. hrs. Previous computer experience required.

Includes digital and video cameras, color scanners, the Internet, digital sound, resource CDs, HyperStudio and strategies to plan for multimedia, project-based, thematic learning, and guidance in developing lessons for learners in specific skill areas. For special education, school-based team members who want to create electronic learning environments for their learners and/or use multimedia technologies with learners in inclusive classrooms. Pugliese.

***SPED 456 Assistive Technology and Learning Disabilities**

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Teaches numerous high- and low-tech ideas and resources for helping learners with learning disabilities build compensatory skills, participate more fully, build self-confidence, and experience greater success. Discusses use of tools like highlighter pens, digital clocks, tape recorders, notebooks, and computers for teaching basic skills; writing, organizing, and reference; organization of time; online services; reading electronic books; and speech synthesis. Wanderman.

***SPED 458 Introduction to Adaptive Technology for Learners with Special Needs**

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Teaches a range of low-tech and technology-based solutions that enable a learner to access the curriculum and function at an optimal level in the classroom, as mandated by legislation supporting learn-

ers with special needs in public education. Pugliese.

***SPED 459 Electronic Portfolios: Alternate Assessment for Learners with Special Needs**

2-4 sem. hrs. Prereq.: Previous computer experience.

Provides an opportunity to create electronic portfolios that document learning. Uses performance assessment strategies and multimedia authoring technology to create portfolios, build alternate methods, and show individual learners' achievements. Includes planning for performance-based assessment, writing rubrics, and portfolio design elements. Helps participants to organize their own personal portfolios. Pugliese.

***SPED 463 Universal Classroom Design: Creating an Accessible Curriculum in the Inclusive Classroom**

2-4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Uses digital media to mold existing and emerging curriculum materials and approaches to teaching, making it more responsive to the needs of diverse learners. Develops PreK-12 curriculum and teaching strategies sensitive to all learners, especially students in general education classrooms with high-incidence disabilities such as mild cognitive and fine motor difficulties or ADHD. Staff.

***SPED 465 Mentoring in Behavioral Education**
4-16 sem. hrs. Consent of Department

Teaches supervision and mentoring to students using the basic principles of behavior analysis in the classroom or work setting. Cameron.

***SPED 469 Topics in Clinical Practice**
2-8 sem. hrs.

Involves working with learners with moderate or severe disabilities under the mentorship of a faculty adviser. Explores classroom techniques and procedures using concept papers or a critical review of the literature on a specific topic. Fleming.

***SPED 470 Technology for Augmentative and Alternative Communication**

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Teaches technology for augmentative/alternative communication (AAC). Discusses candidacy, assess-

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

ment, and goals of intervention within the framework of alternative access options and functional outcomes. Considers different AAC systems and devices and computer applications for authoring an integrated system for enhanced participation, functional communication, language development, and issues related to education. Staff.

*SPED 473 Advanced Applications of Alternative Access Technologies

4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Examines current alternative access technologies and related accommodations for enhancing student participation in learning, written and expressive communication, environmental control, and power mobility. Teaches how to identify and apply technology solutions consistent with the individual's physical challenges. Provides additional information on adaptations for individuals experiencing visual and/or hearing challenges. Staff.

*SPED 475 Evaluation of Educational Software
4 sem. hrs. Prereq.: SPED 322 or consent of the department.

Examines educational software, including reference materials, simulations, tools, problem solving, early learning, and drill and practice. Develops evaluation criteria for software and Web sites. Explores the roles of learner and teacher and how computers can facilitate research, organization, and problem solving. Teaches selection of appropriate educational software and Web sites to integrate into curriculum. Staff.

SPECIAL EDUCATION PRACTICUM

In addition to the requirements on page 102, special education students must pass all applicable sections of the MTEL as designated by the Massachusetts Department of Education, including the Communication and Literacy and the subject matter and Foundations of Reading sections, in order to advance to final professional courses and register for SPED 311. Students must submit formal documentation of test scores to the special education program prior to registration. The director of clinical teaching in special education can assist students in reviewing individual program requirements.

*SPED 311 Prepracticum Seminar: Moderate Disabilities (PreK-8); Moderate Disabilities (5-12); Severe Disabilities (Levels: All)

No credit.

Discusses and shares prepracticum portfolios, reviews competencies and requirements for provisional or initial licensure, and prepares for the spring semester practicum. Requires weekly seminar. Pass/fail. Staff.

*SPED 338 Practicum: Moderate Disabilities (PreK-8)

4-16 sem. hrs. Prereq.: Consent of the department.

Involves full-time supervised teaching responsibilities in a public school classroom (PreK-8) with learners with moderate disabilities. Requires papers and attendance at weekly seminars. Tierney, Hardin.

*SPED 339 Practicum: Moderate Disabilities (5-12)

4-16 sem. hrs. Prereq.: Consent of the department.

Involves full-time supervised teaching responsibilities in a public school classroom (5-12) with learners with moderate disabilities. Requires papers and attendance at weekly seminars. Tierney, Hardin.

*SPED 368 Practicum: Severe Disabilities (Levels: All)

12-16 sem. hrs. Prereq.: Consent of the department.

Involves full-time supervised teaching responsibilities in a public school with learners with severe disabilities. Evans, Tierney.

INTEGRATED BACHELOR'S-MASTER'S PROGRAM IN GENERAL AND SPECIAL EDUCATION

(Kathleen Dunn Bolars)

This five-year program is planned for students who wish to take more liberal arts and science electives in addition to their liberal arts and science majors at the undergraduate level and who wish to have a year-long internship at the graduate level.

The fifth year of the program is an internship in a public school. Programs are individually arranged to meet students' specific needs. Students must complete a formal application to the MAT, MATESL, or MSED programs during

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

their junior year. The two degrees will be awarded sequentially or concurrently, depending on each student's course of study. The all-College independent learning requirement must be completed during the fourth year of the program for students to receive their undergraduate degree at that time. Students in the integrated program will receive initial licensure.

Requirements: Depending on the program, the MAT, MATESL, and MEd degrees require completion of from thirty-two to forty semester hours beyond the 128 needed for the BA or BS for initial licensure. Program administrators will explain all options for the integrated degrees. Applicants to the program must have a minimum GPA of 3.00. In addition, general education majors must have achieved a passing score on the Communication and Literacy sections of the MTEL and special education majors must have achieved a passing score on all sections of the MTEL.

See the directors of clinical programs in general or special education for program requirements.

HUMAN SERVICES PROGRAM

Human Services Major (4 semester hours)

This major is designed for students who wish to work in either public or private human service organizations. It consists of core requirements, electives to be planned with an adviser, and an internship in the senior year.

I. Core requirements (28 semester hours):

HUMV 130	Introduction to Human Services
EDUC 135	Handicapping Conditions: Needs, Laws, and Rights
HUMV 137	Growth and Change in Individuals and Families
HIST 219	History of Sexuality and the Family
SOCI 230	Family and Society
HUMV 212	Human Service Advocacy
HUMV 235	Communication and Intervention Skills in the Helping Professions

II. Program electives (8 semester hours):

In consultation with their advisers, students will design a specific program including at least two additional electives that reflect their particular interests. At least four semester hours must be earned in a race/ethnicity course. Students are encouraged to choose electives from psychology, sociology, economics, or political science.

III. Internship (8 semester hours):

HUMV 370 Internship in Human Services

Human Services Minor (20 semester hours)

A minor in human services includes:

HUMV 130	Introduction to Human Services
HUMV 137	Growth and Change in Individuals and Families
HUMV 212	Human Service Advocacy
SOCI 230	Family and Society
or EDUC 135	Handicapping Conditions: Needs, Laws, and Rights
HUMV 235	Communication and Intervention Skills in the Helping Professions

COURSES IN HUMAN SERVICES

HUMV 130 Introduction to Human Services (F-1,2)

4 sem. hrs.

Introduces the human services profession as practiced in both non- and for-profit organizations. Explores the history of public assumption of responsibility for the delivery of human services, focusing on an investigation of the needs and rights of underserved people in American society. Examines the nature and sources of prejudice and the beliefs and behaviors of government, the public, and various client populations. Ward.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

HUMV 137 Growth and Change in Individuals and Families (S-1,2)

4 sem. hrs.

Studies women and men in work and family environments as they develop from youth to old age. Stresses gender, racial, and social class differences in family orientation and structure and current factors leading to family disruption. Emphasizes formal and informal social support systems as they apply to adults. Taylor.

HUMV 212 Human Service Advocacy (S-1,2)

4 sem. hrs. Prereq.: HUMV 130.

Focuses on advocacy as a strategy for gaining the rights to which individuals and groups are entitled. Explores how advocacy groups affect public policy decisions, theories of change relating to case and class advocacy, and the processes of legislation and litigation in human rights. Involves group projects, class presentations, and fieldwork. Taylor.

HUMV 235 Communication and Intervention Skills in the Helping Professions (F-1,2)

4 sem. hrs.

Examines theories and principles of interpersonal communication and strategies for effective helping relationships by improving interviewing and communication skills for use with diverse populations. Offers human service students an opportunity to practice listening, attending, paraphrasing, and supporting others. Includes special issues relating to interpersonal communication and human diversity, particularly sexual orientation, social class stratification, and service delivery to people of color. Verba.

HUMV 370 Internship in Human Services (S-1,2)

8 sem. hrs.

Provides work experience at a social services agency. Includes weekly seminars to discuss issues and concerns generated from experiences in the field and relevant to becoming professional human service workers. Involves case studies. Not permitted in the summer. Taylor

Department of English

*Pamela Bromberg, **Chair and Professor**

David Gullette, **Professor

Lowry Pei, **Professor**

Afaa Michael Weaver, **Alumnae Professor**

Douglas Perry, Jr., **Associate Professor**

Richard Wollman, **Associate Professor**

Renee Bergland, **Assistant Professor**

Susan Bloom, **Assistant Professor**

Kelly Hager, **Assistant Professor**

Cathryn Mercier, **Assistant Professor**

Della Scott, **Instructor**

Jill Teitelman, **Lecturer**

Ellen Donovan, **Staff Assistant**

*On leave fall 2002.

**On leave spring 2003.

The study of literature as embodied in the English major has a number of goals: to familiarize the student with the work of important writers; to introduce her to the individual and cultural values, ideas, debates, and insights woven into literature; and to sharpen her understanding of the English language. Repeated practice in thinking, writing, and speaking about literary texts is a way of helping the student discover her own voice, develop her skills of critical analysis, and gain confidence in herself as an independent thinker.

The student majoring in English learns to read with discernment, an ability that can enrich her for the rest of her life. At the same time, she develops pragmatic skills that will serve her well in the world of the professions. Simmons English majors have gone on to successful careers in college teaching, law, publishing, journalism, advertising, business, government service, high technology, and secondary education.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Requirements: The major in English consists of ten courses given by, or approved by, the department. The following courses are required of all majors:

ENGL 121	Shakespeare
ENGL 210	Critical Interpretation

All majors must elect ENGL 210 as soon as possible after declaring an English major; students considering an English major are urged to take ENGL 210 in their sophomore year.

Students may choose either the writing or literature options for their English majors. Described below are additional requirements for each option.

The Writing Option

- One course covering literature before 1610 (ENGL 111, 112, 315, 321, or 326)
- One course covering literature from 1610-1800 (ENGL 231, 243, or 342)
- One course covering nineteenth-century English literature (ENGL 254, 304, 306, 307, or 311)
- One course in American literature before 1900 (ENGL 261, 262, or 312)
- Two writing courses (ENGL 105, 108, 305, or 309)
- Two literature electives

Note: Two of these ten courses must be 300-level literature seminars

The Literature Option

- One course covering literature before 1610 (ENGL 111, 112, 315, 321, or 326)
- One course covering literature from 1610-1800 (ENGL 231, 243, or 342)
- One course covering nineteenth-century English literature (ENGL 254, 304, 306, 307, or 311)
- One course in American literature before 1900 (ENGL 261, 262, or 312)
- Four literature electives

Note: Two of these ten courses must be 300-level literature seminars

Independent study (ENGL 350 and 355) may be substituted for any of the courses offered in the required areas.

In consultation with her departmental adviser, each student is encouraged to choose required and elective courses to extend the range of her familiarity with literature or to explore in greater depth areas of particular interest: historical periods, comparative literature studies, genres, themes, or individual figures.

Although most students will have little difficulty planning their programs within the suggested framework, students who wish to modify it are invited to consult with the department chair. Such students may want to take greater advantage of the independent learning option.

In the Department of English, some or all of the College's independent learning requirement can be met by any student in the following ways: ENGL 350, 355, 370, or 380 or a special project in an appropriate 300-level course, elected after consultation with the instructor regarding its suitability for this purpose. Alternatively, English majors may meet the requirement by taking appropriate courses or completing projects in an area other than English.

Honors in English

To become a candidate for honors in English, a student must have a GPA of 3.67 in English and submit an application and a portfolio by the end of the first semester of her junior year to the chair of the department. The portfolio should include a writing sample, two letters of recommendation, and a statement of intent describing intellectual interests and reasons for pursuing honors in English. The chair, in consultation with members of the department, will determine candidacy. Honors in English requires that candidates complete the regular English major through either the writing option or the literature option, plus ENGL 350 Independent Study followed by ENGL 355 Thesis. Honors in English also requires that the student maintain a GPA of 3.67 in English.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

Students intending to continue their specialization in English at the graduate level will find it advisable to take the honors program. Students considering graduate work are also strongly urged to take a significant number of English courses at the 300-level and to take a literature course in another modern language. Interested students should consult with Richard Wollman, director of the graduate program in English.

Minor in English

A minor in English requires five courses from departmental offerings, including at least one at the 200/300 level.

Graduate Programs in English

For information about the Master of Arts in English, see pages 241-242.

COURSES

Of the 100-level courses, the following may be particularly appropriate for first- and second-year students, for non-English majors, and for students just beginning the study of literature: ENGL 110, 111, 112, 121, 172, 178, 184, 192, 193, and 195.

ENGL 104 Modes of Writing (F-1,2; S-1,2)
4 sem. hrs.

Teaches intermediate and advanced students to expand their writing skills through a variety of forms: interviews, persuasive essays, film, theater and art reviewing, journalism, and autobiography. Includes readings of contemporary examples of each form. Staff.

ENGL 105 Creative Writing: Non-Fiction (M1)
(F-1,2; S-1,2)
4 sem. hrs.

Designed for students with a solid base of writing skill who wish to grow further as writers. Teaches writing of nonfiction that a noncaptive audience would willingly read. Focuses primarily on the personal narrative. Pei, Gullette.

ENGL 108 Creative Writing: Fiction and Poetry
(M1) (F-1,2; S-1,2)
4 sem. hrs.

Targets both the eager and curious and the seasoned writer seeking structure, feedback, and models of excellence in a workshop setting. Assumes that those who want to write are those who have been deeply moved by the writing of others. Includes extensive reading in both genres and attendance at readings in the Boston area. Weaver.

ENGL 110 Introduction to Literature (M2)
(F-1,2; S-1,2)
4 sem. hrs.

Teaches the art and skill of reading fiction, poetry, and plays for pleasure and understanding. Designed for those who love to read but are not necessarily intending to major in literature. Includes seminar-style discussions and frequent writing. Gullette, Pei.

ENGL 111 Greek Mythology and Religion
(M2) (F,S-1)
4 sem. hrs.

Examines myths about the principal gods, goddesses, and heroes of ancient Greece and the influence of Greek mythology on later literature, language, and the visual arts. Includes readings from Homer, Hesiod, Sappho, Ovid, and Greek dramatists. Wollman.

ENGL 112 The Bible (M2) (S-1,2)
4 sem. hrs.

Closely studies the Old and New Testaments, with attention to the problem of strategies of interpretation. Considers themes including the use of metaphor; shifting attitudes toward sex; time and typology; and theological versus cultural perspectives. Wollman.

ENGL 121 Shakespeare (M2) (F-1,2)
4 sem. hrs.

Analyzes major plays with commentary on the theater of Shakespeare's London. Includes films and attendances of live performances of Shakespeare's plays when possible. Gullette.

F = Fall
S = Spring
U = Summer
STC = Short-Term
Course
1 = Academic
Year 2002-2003
2 = Academic
Year 2003-2004
M = Mode

ENGL 139 Modern Poetry (M2) (F-1,2)

4 sem. hrs.

Addresses modern and contemporary poetry as the moving relation between individual consciousness and the world. Examines both the passion and energy of modern poetry as a meeting place between imagination and the resistance to and fear of poetry in our culture. Primarily considers H.D., Stevens, Frost, Elizabeth Bishop, and others of their contemporaries. Weaver.

ENGL 172 Modern American Fiction (M2) (S-1,2)

4 sem. hrs.

Discusses the novels of major American writers of the last sixty years, including such authors as William Faulkner, Toni Morrison, Philip Roth, William Styron, John Gardner, and Anne Tyler. Perry.

ENGL 175 The Harlem Renaissance (M2) (S-1,2)

4 sem. hrs.

Focuses on the concept of double consciousness as expressed in the search for self, satisfaction, and freedom. Other topics include the politics of Du Bois and Garvey, the Negro uplift movement, the impact of jazz on literature, and the demand of writers to create positive images during the times of lynching and Jim Crow laws. Writers include Langston Hughes, Zora Neale Hurston, Nella Larsen, and Claude McKay, among others. Scott.

ENGL 176 Black Fiction in America (M2) (F-1,2)

4 sem. hrs.

Studies selected works of twentieth-century black fiction in America. Centers analysis on the examination of black literary achievements and the nature of the social and political climates that underlie contemporary literature. Scott.

[ENGL 178 Multicultural Themes in Modern American Literature

4 sem. hrs. Not offered in 2002-2004.]

Studies personal, family, and cultural conflicts created by the tensions between ethnic and American loyalties in fictional and non-fictional works by African American, Jewish, Native American, Asian

American, Latino, and other authors. Focuses on the dilemma of affirming the values of ethnic identity in a civilization professing the virtues of assimilation. Staff.

ENGL 184 Modern World Drama (M2) (S-2)

4 sem. hrs.

Introduces a series of powerful international plays by writers from England, Europe, America, Africa, and Asia. Examines works by Brecht, Fugard, Pinter, Stoppard, Soyinka, Huang, and others—all playwrights who have shaped the theater of the twentieth century in significant ways and continue to have a major impact on audiences throughout the world. Gullette.

[ENGL 192 Madness in Literature (M2)

4 sem. hrs. Not offered in 2002-2004.]

Examines madness in literature as a higher form of sanity, as transcendence, as a source of creativity, and as a challenge to traditional assumptions about identity. Includes readings in novels, short stories, drama, and poetry by writers such as Poe, Hesse, Pirandello, Kafka, Faulkner, Plath, and Atwood. Wollman.

ENGL 193 Women in Literature (M2) (S-1,2)

4 sem. hrs.

Explores nineteenth- and twentieth-century literature written by and about women. Considers how women writers have challenged conventional notions of who women really are and who they long to become. Studies writers including Jane Austen, Charlotte Brontë, Louisa May Alcott, Mary Shelley, Christina Rossetti, Jhumpa Lahiri, Ahdaf Souerif, and others. Hager.

ENGL 195 Art of Film (M2) (F-1,2)

4 sem. hrs.

Serves as an introduction to film analysis by surveying Hollywood genres and international classics. Includes a variety of films by directors such as Hitchcock, Hawks, Ford, Ray, Renoir, and Buñuel. Bergland, Hager.

ENGL 210 Critical Interpretation (F-1,2; S-1,2)

4 sem. hrs.

Introduces literary criticism and the study of literary genres, historical periods, and major authors. Considers how we read, analyze, and write about lit-

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

erature from different critical perspectives. Specific genres, periods, and authors vary from semester to semester. Includes frequent, varied writing assignments. Required for all English majors. Hager, Bromberg.

ENGL 231 English Literature of the 17th Century (F-1,2)

4 sem. hrs.

Introduces literature of the seventeenth century through study of the metaphysical wit and cavalier poetry of Donne, Herbert, Marvell, Milton, and Jonson; the prose of Bacon and Browne; and the poetry of Phillips, Wroth, and Amelia Lanyer. Themes include manuscript and print culture, public politics and private culture, and sex and religion. Wollman.

ENGL 243 The English Novel through Austen (F-2)

4 sem. hrs. F-2

Considers the development of the English novel, with emphasis on narrative technique and the cultural history of the novel in the eighteenth century. Novelists may include Behn, Fielding, Burney, Austen, Walpole, Shelley, and Dickens. Bromberg.

ENGL 254 The English Novel from Victorians to Moderns (S-1)

4 sem. hrs.

Studies major English novelists, such as Charles Dickens, Charlotte Brontë, George Eliot, Anthony Trollope, Thomas Hardy, Virginia Woolf, D. H. Lawrence, E. M. Forster, and at least one non-canonical novelist. Hager.

ENGL 261 American Literature to the Civil War (F-1,2)

4 sem. hrs.

Studies American literature from its beginnings to the Civil War; from its pre-literature – recording the encounters among the Native Americans, English, Spanish, French, and Africans – to the first emergence of America's literature of diversity, exemplified by such writers as Douglass, Jacobs, Emerson, Fuller, Thoreau, Hawthorne, Dickinson, and Melville. Perry.

ENGL 262 American Literature from 1865-1920 (S-1,2)

4 sem. hrs.

Focuses on the responses of American writers to the change from a predominantly rural small-town society to an urban industrialized one and the accompanying challenges to previous racial and gender stereotypes. Texts include poetry by Walt Whitman and Emily Dickinson; fiction by Mark Twain, Henry James, Kate Chopin, Theodore Dreiser, and Edith Wharton; and W.E.B. DuBois's *Souls of Black Folk*. Bergland.

[ENGL 274 American Poetry

4 sem. hrs. Not offered in 2002-2004.]

Studies major American poets and the process by which the creation of a self precedes the creation of one's poetry. Attends to such figures as Walt Whitman, Emily Dickinson, Robert Frost, Marianne Moore, Wallace Stevens, William Carlos Williams, and Robert Lowell. Staff.

ENGL 298 Feminist Film Studies (S-2)

4 sem. hrs.

Focuses on the ways films define gender and on the direction that film criticism takes when feminism goes to the movies. Through films from the 1930s to the present, examines how popular culture implicitly and explicitly locates gender and sexuality along a continuum of the acceptable and the perverse. Includes an intensive consideration of feminist film criticism and theory from 1975 to the present. Bergland.

ENGL 304 Problems in Romantic Literature: The Romantic Rebel (S-2)

4 sem. hrs.

Begins with Milton's *Paradise Lost*, the subtext for all Romantic rebellion, and moves to Blake, its great theorist and visual artist, to the poetry of Wordsworth and works by women Romantic poets. Concludes with the female perspective on Romantic rebellion in the novels of the Brontë sisters and in Mary Shelley's *Frankenstein*. Bromberg.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

ENGL 305 Advanced Creative Writing:
Non-Fiction (F-1,2)

4 sem. hrs. Prereq.: ENGL 105 or equivalent, consent of the instructor, or graduate standing.

Concentrates on the writing of personal narratives and essays. Encourages structural and stylistic experimentation, imitation of models, and testing of one's limits as a writer. Requires short critical exercises to sharpen consciousness of form and technique in non-fiction. Pei.

ENGL 306 Victorian Literature and Culture (F-2)

4 sem. hrs.

Surveys British poets, prose writers, and novelists from the 1840s to the turn of the century. Studies writers that may include Tennyson, Robert and Elizabeth Browning, Matthew Arnold, Florence Nightingale, Queen Victoria, Darwin, Ruskin, Mill, Newman, and Carlyle. Hager.

ENGL 307 Jane Austen and Virginia Woolf (S-1)

4 sem. hrs.

Studies the two major English women novelists of the nineteenth and twentieth centuries in relation to their major works and current critical debates. Bromberg.

ENGL 308 The Postcolonial Novel (F-2)

4 sem. hrs.

Studies the novels of such writers as Joseph Conrad, Jean Rhys, V.S. Naipul, Nadine Gordimer, Tayeb Salih, Chinua Achebe, Buchi Emecheta, Jamaica Kincaid, and Anita Desai in the context of contemporary post-colonial theory. Bromberg.

[ENGL 309 Advanced Creative Writing: Fiction and Poetry

4 sem. hrs. Not offered in 2002-2004.] Prereq.: Consent of the department or graduate standing.

Designed for students who have prior experience writing verse, fiction, or drama. Emphasizes individual conferences with the instructor and group meetings to read and discuss work produced during the semester. Encourages submission of work for publication. Gullette.

ENGL/CHL 311 Victorian Children's Literature (F-1)

4 sem. hrs.

Examines the wide variety of Victorian literature written for children, from fairy tales and nonsense verse to didactic fiction and classic examples of the Victorian bildungsroman. Authors studied may include Lewis Carroll, Charles Kingsley, Frances Hodgson Burnett, Dinah Mulock Craik, Christina Rossetti, Robert Louis Stevenson, Charlotte Mary Yonge, and Rudyard Kipling. Hager.

ENGL 312 Classic American Writers (S-1, F-2)

4 sem. hrs.

Studies in depth, with critical readings, the major nineteenth-century writers Hawthorne, Dickinson, and Melville, with attention to their contributions to the development of a distinctively American literature. Perry.

ENGL 313 Survey of Literature for Children and Young Adults (F-1,2; U-1,2)

4 sem. hrs. Prereq.: Sophomore standing.

Provides a broad overview of the field of children's and young adult literature, including historical and contemporary considerations, criticism, and representative works from major genres. Bloom, Mercier.

ENGL 314 The Invented Self in Modern American Fiction (F-1)

4 sem. hrs.

Looks at Americans as authors of themselves and creators of their own personae in the modern American novel. Examines both the literary and societal implications of such self-fabrications in works by F. Scott Fitzgerald, William Faulkner, Philip Roth, and Toni Morrison. Perry.

ENGL 315 Topics in Early Literature: Chaucer's *Canterbury Tales* and Its Milieu (F-2)

4 sem. hrs.

Focuses on Chaucer's masterpiece *The Canterbury Tales* in the context of other early literature and drama that preceded it: *Sir Gawain and the Green Knight*, *The Mystery Plays*, and *Everyman*. Wollman.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode

ENGL 318 The Dramatic Imagination in America (S-1,2)

4 sem. hrs.

Focuses on twentieth-century American plays by writers like Susan Glaspell, Eugene O'Neill, Clifford Odets, Tennessee Williams, Arthur Miller, Lorraine Hansberry, Edward Albee, and August Wilson. Reads plays as literature and enacts them in class—as far as possible—as theater. Weaver.

ENGL 321 Studies in Shakespeare (S-1,2)

4 sem. hrs. Prereq.: ENGL 121 or consent of the department.

Closely analyzes a few major plays and varied critical approaches to them. Wollman, Gullette.

[ENGL 322 The Postmodern Novel
4 sem. hrs. Not offered in 2002-2004.]

Explores an array of postmodern fiction and film, primarily from England and the Continent. Authors include Barnes, Kundera, Fowles, Calvino, Byatt, Atwood, and Swift. Designed for graduate students and advanced English majors. Bromberg.

ENGL 323 Special Topics in Literature:
Race, Gender, and Intertextuality in American Women's Poetry (S-1,2)

Focuses on Emily Dickinson and Adrienne Rich alongside their influences and inheritors, from Anne Bradstreet to Joy Harjo. Uses the framework of race, gender, and intertextual analysis to focus our discussion. Bergland.

ENGL 324 James Joyce (F-1)

4 sem. hrs.

Examines *Dubliners*, *A Portrait of the Artist as a Young Man*, *Ulysses*, and selections from *Finnegan's Wake*. Considers Joyce's transformation from fin-de-siècle ironist to high modernist comedian, as well as a broad selection of Joyce criticism, including the French feminists who have adopted him as one of their own. Gullette.

ENGL 325 Modern Irish Literature (F-2)

4 sem. hrs.

Considers major works in verse, fiction, and drama by William Butler Yeats, James Joyce, John Millington Synge, Sean O'Casey, and some of the newer voices in Irish writing, such as Seamus

Heaney and others whose work has been influenced by the recent sectarian violence in Northern Ireland. Gullette.

ENGL 326 Studies in Medieval and Renaissance Literature (F-1)

4 sem. hrs.

Studies topics including Milton, magic and fantasy in the Renaissance, and literary depictions of love in the sixteenth century. Wollman.

[ENGL 342 Studies in 18th-Century Literature
4 sem. hrs. Not offered in 2002-2004.]

Examines the ways the poets, playwrights, journalists, and fiction writers of the period imitated, reworked, and finally rejected classical and Renaissance genres to forge new kinds of literary expression. Reading may include works by Aphra Behn, Dryden, Swift, Pope, Anne Finch, Lady Mary Wortley Montagu, Johnson, and Burney. Bromberg.

ENGL 350 Independent Study (F-S ,1-2)

4 sem. hrs. Prereq.: Consent of the instructor. Staff.

ENGL 355 Thesis (F-S ,1-2)

4 sem. hrs.

Normally follows ENGL 350. Elected in the semester in which the thesis will be completed. Staff.

ENGL 370 Internship (F-S ,1-2)

8 sem. hrs. Prereq.: Consent of the department.

Offers English majors one semester of supervised on-the-job experience in such fields as publishing and broadcasting. Not permitted in the summer. Staff.

ENGL 380 Fieldwork (F-S ,1-2)

4 sem. hrs. Prereq.: Consent of the department. Staff.

F = Fall
S = Spring
U = Summer
STC = Short-Term Course
1 = Academic Year 2002-2003
2 = Academic Year 2003-2004
M = Mode
