HUI 216-I Italian Civilization Through the Ages
The historical development of civilization in Italy with reference to literature and connection to artistic expressions such as visual arts, music, and theatre. 
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUI 231-D Sex and Politics in Italian Cinema
The cinematic representation of gender, class, and sexual politics in post-World War II Italian films and the relationship of these themes to Italian history, society, and culture are discussed. Films by directors such as Bertolucci, Fellini, and Wertmuller are studied. Readings include selected works of film history, criticism, and theory.
3 credits

HUI 234-G Introduction to 20th-Century Drama
A study of avant-garde drama through the analysis of texts by Marinetti, Bontempi, Pirandello, Betti, Beckett, Ionesco, and Tennessee Williams. Important questions such as identity and diversity are discussed from a variety of perspectives within the social, psychological, sexual, and multicultural contexts of our time.
Advisory Prerequisite: Completion of D.E.C. category B or THR 101
3 credits

HUI 235-G Sex, Love and Tragedy in Early Italian Literature
A study of the interactions between the sexes in contrast with humankind’s spiritual needs in the major works of early Italian literature. Dante’s Inferno and Purgatorio, Boccaccio’s Decameron and Petrarca’s poetry are analyzed. May be used to satisfy English major requirements. 
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUI 236-K The Italian-American Scene
Exploration of the phenomenon of Italian-American experiences, with emphasis on issues of immigration and ethnicity. Studies in anthropology, history, sociology, literature, and culture provide historical and theoretical backgrounds of the experience of Italians in North and South America and their contributions to American culture.
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUI 237-K Images of Italian American Women
Examination of the role of Italian American women through literature, film, politics, and music. The specific ways they have contributed artistically and socially to the American cultural scene from the first wave of Italian American immigration to the present is considered. This course is offered as both HUI 237 and WST 237.
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUI 239-I Modern Italy
A survey of contemporary Italy and its political, social, and economic structure, as well as the study of cultural life and institutions, within the context of its historical development, with comparisons to American models and standards.
3 credits

HUI 306-I The Early Renaissance in Italy
Art in Italy from the late 13th through the 15th centuries, with special emphasis on Florence and Siena, and such major figures as Masaccio, Donatello, Piero della Francesca, and Botticelli. This course is offered as both ARH 306 and HUI 306. 
Prerequisite: ARH 101 and 102
3 credits

HUI 307-I The Age of Michelangelo in Central Italy
An exploration of the works of Michelangelo, Da Vinci, and other major masters, including Raphael, Bramante, and Pontormo, who inspired, were influenced by, or rejected the work and ideals of Michelangelo. This course is offered as both ARH 307 and HUI 310. 
Prerequisite: ARH 101 and 102
Advisory Prerequisite: ARH 306
3 credits

HUI 310-I Splendors of Renaissance Art in Venice
The special qualities of Venetian art, which blends Byzantine, Islamic, and Western traditions, are explored through the works of such major figures as Giovanni Bellini, Giorgione, Titian, Veronese, and Palladio. Course offered as both ARH 310 and HUI 310. 
Prerequisite: ARH 101 and 102
Advisory Prerequisite: ARH 307
3 credits

HUI 331-G Italian Literature
A topics course given in English on a major Italian author or literary movement in relation to European or American literature. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. May be used to satisfy English or comparative literature major requirements with permission of major department.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUI 333-K The Italian American Experience in Literature
Literary and historical perspectives on the experience of Italians in America and their contribution to American culture from the earliest wave of Italian immigration to the present day. This course is offered as both EGL 333 and HUI 333. 
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUI 338-K Images of Italian Americans in Film
Italian American ethnicity as represented in mainstream and independent American cinema from the silent era to the present. Particular attention is paid to the origin and existence of the traditional stereotypes associated with these representations, how they reflect the changing role of immigrants from the Industrial Revolution to the present, and how Italian American filmmakers respond to them.
Prerequisite: U3 or U4 standing
Advisory Prerequisites: HUM 201; HUI 231
3 credits

HUI 390-G Italian American Studies in the Humanities
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes. 
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUI 392-F Italian American Studies in the Social and Behavioral Sciences
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes. 
Prerequisite: U3 or U4 standing
3 credits

HUI 431 Special Topics in Italian Cinema
A topics course given in English on Italian cinema. Topics may include films of a particular actor or director, genre, theme, or historical period. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. 
Prerequisite: HUI 231
Advisory Prerequisite: HUI 338
3 credits

HUI 447 Directed Readings in Italian Studies
Individually supervised readings in Italian studies. Primarily for students who do not have the language proficiency to take ITL 447. May be repeated. 
Prerequisite: Permission of department
1-6 credits

HUI 475, 476 Undergraduate Teaching Practica in Italian and Italian American Studies I, II
Students may not serve as teaching assistants in the same course twice. 
Prerequisite to HUI 475: Permission of department
Prerequisites to HUI 476: HUI 475; permission of department
3 credits per course, S/U grading

www.stonybrook.edu/ugbulletin
HUL

Romance Languages Taught in English

HUL 324 Romance Linguistics
The linguistic evolution and synchronic grammars of the Romance languages are studied. The course is conducted in English.
Prerequisite: One of the following: FRN 312, ITL 311, ITL 312, LAT 112, SPN 312, LIN 101, LIN 201, LIN 211
3 credits
HUM 109-B Philosophy and Literature in Social Context (III)
The role of literature and philosophy in understanding and critically assessing personal experience and social life. The links among literary texts, philosophical issues, and political and social commitments are explored. Topics include the relations between language and experience, the role of philosophical thinking through literary texts, and the significance of literary expression in different cultural and historical situations. This course is offered as both HUM 109 and PHI 109.
3 credits

HUM 121-B Death and Afterlife in Literature
Through discussion of representative contemporary and classical texts, this course addresses the topic of how human beings have chosen to live with the one certainty of their existence, its eventual conclusion in death, and how various images of afterlife or denial of its possibility have shaped those choices.
3 credits

HUM 122-B Images of Women in Literature
An historical and intercultural examination of selected representations of women in world literature ranging from classical literature to modern evocations of women’s changing social roles and the rise of feminine self-consciousness.
3 credits

HUM 123-B Sexuality in Literature
An exploration of the expression and interpretation of sexual experience in literature and culture, through discussion of selections from world literature and art, both classic and contemporary. Themes include temptation and gratification, desire and fulfillment, and how societies shape gender roles and deviance and set limits on sexual representation in literature and art.
3 credits

HUM 201-D Film and Television: Genres
An introduction to the study of film and television through the concept of genre. Special attention is given to how film and television deal with issues of race and gender.
Prerequisite: Completion of D.E.C. category B
3 credits

HUM 202-D Film and Television: History and Theory
An introduction to the theory and criticism of film and television from the “primitive” era to the present. Weekly film and video showings are accompanied by readings in both contemporary and classical film theory. Special attention is given to mainstream Hollywood cinema as well as to experimental traditions originating in the Soviet Union, France, and Germany.
Prerequisite: Completion of D.E.C. category B
3 credits

HUM 220-G Cross-Cultural Encounters
Introduction to the process and effects of the encounter of two or more previously separate cultures, illustrated by study of historical or contemporary instances of such encounters, and drawing from the art, music, theatre, literature, philosophy, or religion of the selected cultures. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Prerequisite: Completion of D.E.C. category B
3 credits

HUM 447 Directed Readings
Independent work with a faculty member.
Prerequisites: Permission of instructor and director of undergraduate studies
1-6 credits

HUM 475, 476 Undergraduate Teaching Practica I, II
Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled classes. The student is required to attend all the classes, do all the regularly assigned work and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. In HUM 476, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice.
Prerequisites to HUM 475: U3 or U4 standing; permission of instructor and chairperson
Prerequisites to HUM 476: HUM 475; permission of instructor and chairperson
3 credits per course, S/U grading

HUM 495 Humanities Honors Project
A one-semester project for Humanities majors who are candidates for the degree with honors. The project involves independent study and the writing of a senior thesis under the close supervision of an appropriate faculty member.
Prerequisites: Permission of instructor and director of undergraduate studies
3 credits
HUR 141-B The Age of Empire
A survey in English of major Russian writers of the 19th century, including Pushkin, Dostoevsky, and Tolstoy. A brief history of Russian literary masterpieces in the context of world literature and of major cultural movements such as the Renaissance, the Enlightenment, and Romanticism.
3 credits

HUR 142-B Culture and Revolution
HUR 142-B Culture and Revolution Introduction to the major texts of modern Russian literature. Topics include the social and aesthetic rebellions of writers confronted with political oppression (labor camps, prisons, Stalin’s reign of terror) or with outdated literary tradition. Typical cultural modes of rebellion, including avant-garde prose and poetry as well as popular forms of carnival and folk laughter, are explored in literature, theater, and film.
3 credits

HUR 231-I Saints and Fools
An introduction to literature about the lives of saints and the holy fool tradition in major texts of Russian and English literature. Emphasis is placed on the ways authors have used fundamental religious values of humility, the transcendent irrational, and kenosis to confront their own times. Authors considered range from monks to Dickens, Dumas, Chaucer, Gogol, and Pushkin; films include Murder in the Cathedral and Forrest Gump. This course is offered as both EGL 231 and HUR 231.
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUR 232-I Rebels and Tyrants
An exploration of literary rebels and tyrants central to Russian and Anglo-American traditions. The subversive tactics of such writers as Shakespeare, Dostoevsky, Sir Walter Scott, Solzhenitsyn, and Salinger are appraised in the light of the dominant social, political, and aesthetic systems they confront. This course offered as both EGL 232 and HUR 232.
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUR 235-G Crime and Punishment in World Literature
An exploration of the nature of crime and punishment in literature, including readings from Dostoevsky, Dickens, and Nabokov on the depiction of criminals, villains, acts of violence, and the moral code of their time. May be used to satisfy English major elective requirements.
Advisory Prerequisite: Completion of D.E.C. category B
3 credits

HUR 241-D Russian Cinema
Survey of major developments in Society and Russian cinema extending from the groundbreaking innovations of Soviet montage to the popular cinema of the post-communist period. Emphasis on situating the works of, among others, Eisenstein, Tarkovsky, Muratova, and Balabanov within the context of Russia’s tumultuous history and its distinct cultural traditions.
3 credits

HUR 249-I Russia Today
Contemporary cultural trends viewed in terms of their historic social and political context. Recent responses to historical change such as the breakup of the Soviet Union and its relation to the forces that brought about the Russian Revolution, the new economic order, and the search for Russian national identity are explored in literature, the arts, and media.
3 credits

HUR 341-G Russian Literature and the West
A topics course given in English on a major Russian author or literary movement in relation to European or American literature. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. May be used to satisfy English or comparative literature major elective requirements with permission of major department.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUR 393-G Literary Analysis of Russian Texts
Selected topics in literary analysis focusing on the work of one or more Russian authors in translation. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: One literature course at the 200 level or higher
3 credits
HUS

Spanish Literature and Culture Courses in English

HUS 254-J Latin America Today
An introduction to a continental perspective of 20th-century Latin American culture. Latin America’s political, historical, and cultural developments of this century are studied.
3 credits

HUS 255-I Modern Spain
An examination of major cultural and social developments in Spain throughout the 20th century, with special emphasis on the Spanish Civil War, the Franco era, and the transition to democracy. Presented in English, the course seeks to enhance understanding of Spain through analysis of such issues as national character, change and continuity, and regional diversity.
3 credits

HUS 361-G Latin American Literature
A topics course given in English on a major Latin American author or literary movement in relation to European or American literature. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. May be used to satisfy English or comparative literature major requirements with permission of major department.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUS 371-G United States Latino Literature
A topics course given in English on a major Latino author or literary movement in relation to European or American literature. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. May be used to satisfy English or comparative literature major requirements with permission of major department.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: A literature course at the 200 level or higher
3 credits

HUS 390-J Latin American Cinema
A contextual approach to the national cinemas of Latin America. Students develop their skill in film analysis as they examine the specific role of film in re-focusing the terms of ongoing debates on questions of national identity and the function of culture in society.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: One 200-level course in film or one course in Latin American literature, culture, or history
3 credits
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HWC</strong> Social Welfare</td>
</tr>
<tr>
<td><strong>HWC 210 Introduction to Social Work</strong></td>
</tr>
<tr>
<td>Introduces the student to the field of social work. Provides an overview of the variety of settings in which social workers practice. Describes the knowledge, values, and skills which social workers use to help individuals, families, groups, and communities. 1 credit</td>
</tr>
<tr>
<td><strong>HWC 323 Growing Old in America: The Social Conditions Policy and Practice Implications</strong></td>
</tr>
<tr>
<td>Explores the social, political, and economic conditions related to aging in this society. Identifies social policies and program formats that enhance wellness and support dependencies from a positive perspective. Co-scheduled with HWC 523. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 325 Anger Management</strong></td>
</tr>
<tr>
<td>Presents concepts of anger management within a bio-psychosocial context. Students learn how to recognize external manifestations of anger in themselves, clients, organizations, and communities. Focus is on assessment of clients' ability to both recognize anger (&quot;residual&quot; as well as anger &quot;masking underlying feelings&quot;) and methods used for coping. Anger management concepts and skills at the micro, mezzo, and macro levels of practice are explored, including anger management strategies that can be taught to clients as part of an intervention plan. Environmental and societal factors as &quot;igniting events&quot; of anger in individuals, families, groups, and communities are examined. Appropriate assessment and interventions at all levels of practice are delineated. Co-scheduled with HWC 525. Prerequisite: Admission to Undergraduate Health Sciences Center program 2 credits</td>
</tr>
<tr>
<td><strong>HWC 326 Health Care Delivery with Diverse Populations</strong></td>
</tr>
<tr>
<td>An overview of the many facets of health-care delivery and the role of social workers in that delivery. Various systems and diverse populations and how they are treated by the health-care systems are examined. Covered are community-based health-care services, hospital care, long-term care, and the health-care needs and impact of the health-care system on women, African Americans, Latinos, the developmentally disabled, children, and the aged. Co-scheduled with HWC 526. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 329 Complementary and Alternative Medicine</strong></td>
</tr>
<tr>
<td>Human service workers are often required to discuss issues of health and healing. Many individuals, by virtue of their culture, experiences and/or choice, often adhere to a combination of nontraditional and traditional beliefs regarding health care. Familiarizes students with those methods and beliefs most often found in specific cultures. Students will develop an appreciation of each practice in order to interact with clients from a strengths perspective and will gain an international perspective on health-care modalities. Co-scheduled with HWC 529. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 340 Social Issues in Popular Culture</strong></td>
</tr>
<tr>
<td>Movies have been a useful medium that can illustrate current social issues and family dynamics, as well as policy and research dilemmas. Each week, a film with a central practice/research/policy issue provides the basis for a lecture and class discussion. Topics focus on a variety of social issues such as family dynamics, bereavement, adoption, domestic violence, abuse, residential placement, policy, and research. Co-scheduled with HWC 540. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 344 Overview of Substance Abuse</strong></td>
</tr>
<tr>
<td>An examination of the history and development of alcohol and substance abuse problems in the United States. Focuses on the etiology, psychopharmacology, and legal ramifications of the use of licit and illicit substances in our culture. Provides information on a variety of services available to drug abusers, addicted individuals and their families in the fields of prevention, education, and treatment. Co-scheduled with HWC 544. Prerequisite: Admission to Undergraduate Health Sciences Center program 2 credits</td>
</tr>
<tr>
<td><strong>HWC 347 Managing Conflict</strong></td>
</tr>
<tr>
<td>A major concern for health and human service managers is conflict in organization, community, and group settings. The various types of conflicts and the concepts of negotiation and mediation as interventive strategies will be considered. Didactic and experiential learning experiences are utilized. Focus is on analyzing conflict situations and selecting interventive strategies to reduce, contain, or heighten the conflict situation. Oppressive conditions, structures, and processes are considered major determinants of human suffering and individual and social problems; students examine how these oppressive conditions are present in conflict situations and consider ways of dealing with them. Co-scheduled with HWC 547. Prerequisite: Admission to Undergraduate Health Sciences Center program 2 credits</td>
</tr>
<tr>
<td><strong>HWC 349 Overview of Social Work with Special Populations</strong></td>
</tr>
<tr>
<td>Examines the issues that social workers must consider when working with traditionally disenfranchised populations. Emphasis will include micro and macro issues when intervening with gay and lesbian individuals, members of diverse racial and ethnic groups, and women, as well as others. The historic as well as contemporary experiences of these individuals' interactions with the health and human service delivery system will be explored. Co-scheduled with HWC 549. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 351 Law and Social Change</strong></td>
</tr>
<tr>
<td>Introduces students to the interrelationship of the legal process in the United States and the profession of social work. Focuses on the legal process in general, social welfare law, in particular, and the implications for effective social work practice. Co-scheduled with HWC 551. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 361 Implications of Racism for Social Welfare</strong></td>
</tr>
<tr>
<td>Examines personal and institutional racism in the United States and the effect racism has on the delivery of services to individuals who do not fit the traditional &quot;American model.&quot; Examines the historical relationship between racism and social welfare policies, programs and practice, as well as contemporary strategies for change. Co-scheduled with HWC 561. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 363 Homelessness, Politics and Public Health</strong></td>
</tr>
<tr>
<td>Analyzes homelessness as an issue of social policy, including its history, recent causes, and current demographics. Emphasizes the political and economic context that has made homelessness a major social problem. Co-scheduled with HWC 563. 2 credits</td>
</tr>
<tr>
<td><strong>HWC 379 Special Topics in Social Welfare</strong></td>
</tr>
<tr>
<td>Examines significant timely issues confronting the profession. Topics include violence as a public health problem, issues of aging, racism, gender, AIDS, the media, spirituality, forensic social work, international social work, and others. Topics vary each term as faculty develop specific modules that address one or more of these issues. Co-scheduled with HWC 579. 1-3 credits</td>
</tr>
</tbody>
</table>

Spring 2007: updates since Fall 2006 are in red
INT

Living Learning Center in International Studies

INT 201 Democracy and Capitalism
Introduction to the two major ideologies and structures shaping the world today: democracy and the interstate political system, and capitalism and the world economy. How they came into being, how they have been transformed over time, and how and whether they continue to be transformed. The course seeks to understand global connections between democracy and capitalism, and how the workings of the interstate system and the world economy combine to impact power, culture, and social change at both the global and local level.
2 credits

INT 302 Colloquium in International Studies
A colloquium on international studies involving guest experts who discuss particular world topics or regional specialties. Students also contribute class discussions, oral presentations, and a substantial essay on themes drawn from various topics and regions. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: U3 or U4 standing
1 credit

INT 401 Global Social Problems
The consequences of the “globalization” of social, economic, and political life around the world. Topics include economic inequality and poverty; environmental degradation; AIDS epidemics; gender inequality and patriarchy; racism; human rights issues; immigration and migration and how they have shaped and been shaped by the social, political, and economic dynamics underlying them. Consideration of the possibilities of global-local activism and social change. Conducted as part seminar and part practicum.
Prerequisites: INT 201; U3 or U4 standing
3 credits

INT 487 Independent Study in International Studies
Independent research projects on international studies by upper-division students in the minor under the supervision of an instructor. May be repeated twice.
Prerequisites: INT 201; U3 or U4 standing; permission of director of the minor
0-6 credits
## ISE Information Systems

### ISE 300 Writing in Information Systems
See requirements for the Information Systems major, upper-division writing and oral skills requirement.

**Prerequisites:** WRT 102; U3 or U4; ISE major

1 credit

### ISE 305 Principles of Database Systems
The design of database management systems to obtain consistency, integrity, and availability of data. Conceptual models and schemas of data: relational, hierarchical, and network. Students undertake a semester project that includes the design and implementation of a database system. This course is offered as both CSE 305 and ISE 305.

**Prerequisites:** CSE 219 and 220

3 credits

### ISE 308 Software Engineering
Introduces the basic concepts and modern tools and techniques of software engineering. Emphasizes the development of reliable and maintainable software via system requirements and specifications, software design methodologies including object-oriented design, implementation, integration, and testing; software project management; life-cycle documentation; software maintenance; and consideration of human factor issues. This course is offered as both CSE 308 and ISE 308.

**Prerequisites:** CSE 219

3 credits

### ISE 310 Data Communication and Networks
Study of communication networks. Local area networks (LAN), integrated voice and data systems (IVDS), and wide area networks (WAN). Their topologies: bus, token passing, tree, point to point. Protocols, speed, and distance limitations: RS232, TCP/IP; MAP/TOP; ONS, OSI. Network design and management will be studied in various environments. May not be taken by students with credit for CSE/ISE 346. This course is offered as both CSE 310 and ISE 310.

**Prerequisites:** CSE 219 and 220

3 credits

### ISE 315 Database Transaction Processing Systems
Theory and practice of design for applications involving transactional access to a database. Transaction design, schema design, restart and recovery, journaling, concurrency control, distributed databases. Student groups perform design and implementation of significant database application. This course is offered as both CSE 315 and ISE 315.

**Prerequisites:** CSE/ISE 305

3 credits

### ISE 332 Introduction to Scientific Visualization
Visualization of scientific, engineering, medical, and business data sets. Mechanisms to acquire sampled, computed, or synthetic data and methods to transform symbolic into the visual. Topics include classic visualization process; visual perception; volume and surface visualization; methods for visualizing sampled, simulated, and geometric objects; and visualization systems. Emphasis on applications and case studies. This course is offered as both CSE 332 and ISE 332.

**Prerequisites:** CSE 219; MAT 211 or AMS 210

3 credits

### ISE 333 User Interface Development
Survey of user interface systems, including topics such as command language, windowing, multiple input/output devices, architecture of user interface management systems, and tool kits for designing user interfaces. Additional topics may include human factors, standards, or visual languages. Students participate in a project involving the design and implementation of a user interface system. This course is offered as both CSE 333 and ISE 333.

**Prerequisite:** CSE 219

Advisory prerequisite: PSY 103

3 credits

### ISE 334 Introduction to Multimedia Systems
Survey of technologies available for user interfaces. Discussion of hypertext; voice, music, and video together with tools and models for capturing, editing, presenting, and combining them. Capabilities and characteristics of a range of peripheral devices including devices based on posture, gesture, head movement, and touch. Case studies of academic and commercial multimedia systems including virtual reality systems. Students participate in laboratory exercises and build a multimedia project. This course is offered as both CSE 334 and ISE 334.

**Prerequisites:** CSE or ISE major; U3 or U4 standing

3 credits

### ISE 336 Internet Programming
Introduces the design and development of software for Internet commerce. Topics include extended markup language, servlets, cookies, sessions, Internet media types, Web protocols, digital signatures, certificates, encryption, and the wireless Internet. This course is offered as both CSE 336 and ISE 336.

**Prerequisite:** CSE 219

3 credits

### ISE 364 Advanced Multimedia Techniques
Digital media production techniques for high-bandwidth applications such as electronic magazine illustration, broadcast television, and motion picture special effects. Students explore techniques such as 3D modeling and character animation, video compositing, and high-resolution image processing in a state-of-the-art multimedia computing laboratory. High-capacity multimedia storage, high-speed networks, and new technologies such as DVD, HDTV, and broadband will be reviewed. This course is offered as both CSE 364 and ISE 364.

**Prerequisites:** CSE/ISE 334 and permission of the instructor

3 credits

### ISE 390, 391 Special Topics in Information Systems
Lecture or seminar course on a current topic in information systems. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes, but cannot be used more than twice to satisfy ISE major requirements.

**Prerequisites:** ISE or CSE major; U3 or U4 standing

3 credits per course

### ISE 475 Undergraduate Teaching Practicum
Students assist faculty by conducting a recitation or laboratory section that supplements a lecture course. The student participates in laboratory exercises and builds an undergraduate lab section that supplements a lecture course.

**Prerequisites:** U3 standing; permission of faculty sponsor and department

3 credits, S/U grading

### ISE 487 Research in Information Systems
An independent research project with faculty supervision. Only three credits of research electives (AMS 487, BME 499, CSE 487, ESE 499, ESM 490, EST 499, ISE 487, MEC 499) may be counted toward technical elective requirements. May not be taken for more than six credits.

**Prerequisites:** Permission of instructor and department

0-6 credits

### ISE 488 Information Systems Internship
Participation in local, state, national, or international private enterprises, public agencies, or nonprofit institutions. Students are required to submit a written proposal, progress reports, and a final report on their experience to the client and to the department. May be repeated up to a limit of 12 credits but only three credits of ISE or ISE 488 may be used as an elective to satisfy ISE major requirements.

**Prerequisites:** ISE major; U3 or U4 standing; permission of faculty sponsor and department

3 credits, S/U grading

---

Spring 2007: updates since Fall 2006 are in red
COURSE DESCRIPTIONS

ITAL

Italian Language and Literature

ITAL 101 Intensive Elementary Italian
An intensive course covering the elementary Italian program (ITAL 111, 112) in one semester. ITAL 101 is designed for students who have no prior knowledge of the language. A student who has had two or more years of Italian in high school (or who has otherwise acquired an equivalent proficiency) may not take this course without written permission from the supervisor of the course. May not be taken for credit after any other course in Italian.
6 credits

ITAL 111, 112 Elementary Italian I, II
An introduction to spoken and written Italian, stressing pronunciation, speaking, comprehension, reading, and writing. Selected texts are read. Practice in language laboratory supplements class work. ITAL 111 is designed for students who have no prior knowledge of the language. A student who has had two or more years of Italian in high school (or who has otherwise acquired an equivalent proficiency) may not take ITAL 111 without written permission from the supervisor of the course. May not be taken for credit in addition to ITAL 101.
Pre-requisite to ITAL 112: ITAL 111
3 credits per course

ITAL 201 Intensive Intermediate Italian
An intensive course covering the intermediate Italian program (ITAL 211, 212) in one semester. May not be taken for credit in addition to ITAL 211, 212.
Pre-requisite to ITAL 211: ITAL 111 or 112
6 credits

ITAL 211, 212 Intermediate Italian I, II
Intermediate courses in the reading and discussion of selected Italian texts. Completion of grammatical and syntactic points not covered in Elementary Italian. Extensive practice in conversational ability. May not be taken for credit in addition to ITAL 201.
Pre-requisite to ITAL 211: ITAL 111 or 112
Pre-requisite to ITAL 212: ITAL 211
3 credits per course

ITAL 311 Italian Conversation and Composition I
A course in spoken and written Italian, with emphasis on precision and fluency in the spoken form.
Pre-requisite: ITAL 201 or 212
3 credits

ITAL 312 Italian Conversation and Composition II
Reading of selected short passages of prose and poetry in class, with emphasis on improved writing skills, oral expression, and increased mastery of Italian syntax and techniques of literary analysis.
Pre-requisite: ITAL 201 or 212
3 credits

ITAL 313 Italian Vocabulary
A course designed to increase the vocabulary and oral comprehension of students of Italian through media such as television commercials, popular music, folk songs, etc. The particular theme changes each semester. May be repeated twice for credit as the topic changes.
Pre-requisite: ITAL 201 or 212
1 credit

ITAL 395-G Readings in Italian Literature I
Literary analysis and its application to representative short stories and novels chosen from the various periods of Italian literature. Readings, writings, and discussions are in Italian.
Pre-requisite: ITAL 311
3 credits

ITAL 396-G Readings in Italian Literature II
Literary analysis and its application to representative plays and poems chosen from the various periods of Italian literature. Readings, writings, and discussions are in Italian.
Pre-requisite: ITAL 311
3 credits

ITAL 410 Business Italian
A course designed for students who wish to become more proficient in reading, writing, and translating Italian. Students are also trained in the use of Italian in business, in administration, and in everyday professional life. Emphasis is placed on the idiomatic peculiarities of the Italian language and the relation of Italian to the structure of English.
Pre-requisites: ITAL 311 and 312
3 credits

ITAL 411 Advanced Conversation and Composition
A course designed to develop fluency and accuracy in the use of the spoken language through intensive practice, exposition, class discussion, and the use of the language laboratory.
Pre-requisites: ITAL 311 and 312
3 credits

ITAL 412 Advanced Conversation and Syntax
A course designed to acquaint students with the subtleties of Italian grammar and style. Extensive practice in composition and in translation from English to Italian.
Pre-requisites: ITAL 311 and 312 and HUL 324
3 credits

ITAL 424 History of the Italian Language
A study of the history of the Italian language from Latin to its present form.
Pre-requisites: ITAL 311 and 312
3 credits

ITAL 425 Italian and Its Dialects
An examination of the Italian dialects within the larger framework of Romance language development, particularly through primary texts (medieval to modern) in various Italian dialects.
Pre-requisites: ITAL 311, ITAL 312, HUL 324, or permission of instructor
3 credits

ITAL 426 Italian Linguistics
An examination of the linguistic evolution and the synchronic structures (phonology, morphology, and syntax) of standard Italian and some Italo-Romance dialects.
Pre-requisites: ITAL 311, ITAL 312, HUL 324, or permission of instructor
3 credits

ITAL 430 Studies in 13th- and 14th-Century Literature
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 431 Studies in 13th- and 14th-Century Literature
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 432 Studies in 15th- and 16th-Century Literature
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 433 Studies in 17th- and 18th-Century Literature
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 434 Studies in 19th-Century Literature
Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 435 Studies in Contemporary Literature
Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311, 312, 395, and 396
3 credits

ITAL 436 Special Topics in Italian Cinema
A topics course given in Italian on Italian cinema. Topics may include films of a particular actor or director, genre, theme, or historical period. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Pre-requisites: ITAL 311 and 312
Advisory Prerequisite: HUL 231
3 credits

ITAL 440-I The Italian Scene
The reality of Italy and the Italian people through a study of the evolution of the historical, cultural, political, and social character of the nation.
Pre-requisites: ITAL 311 and 312
3 credits

ITAL 441 Free Seminar
A seminar built around a theme such as “Cities in Italian Literature,” “Women in Italian Literature,” “Death and Resurrection in Contemporary Italian Literature,” or “Sin and Sensuality in the Italian Short Story.” A detailed description of the seminar may be obtained from the department for each semester it is offered. May be repeated as the topic changes.
Pre-requisites: ITAL 311 and 312
3 credits

ITAL 447 Directed Readings in Italian
Individually supervised readings in selected topics in Italian language and literature or, alternatively, for the purpose of developing Italian vocabulary in a secondary field, in selected topics in the humanities, social sciences, or natural sciences. May be repeated.
Pre-requisite: Permission of instructor
1-6 credits
ITL 475 Undergraduate Teaching
Practicum in Italian I
Each student conducts a regular problem or tutorial section that supplements a regular language course under the guidance of a master teacher. Responsibilities may include preparing materials for discussion and helping students with problems. Not for major or minor credit.
Prerequisites: Fluency in Italian; permission of instructor and department
3 credits, S/U grading

ITL 476 Undergraduate Teaching
Practicum in Italian II
Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled classes. Students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. The course in which the student is permitted to work as a teaching assistant must be different from the course in which he or she previously served.
Prerequisites: Fluency in Italian; permission of instructor and department
3 credits, S/U grading

ITL 488 Internship
Participation in local, state, national, and international public and private agencies and organizations to apply and reinforce language skills and knowledge of social and cultural institutions.
Prerequisites: ITL 410; permission of instructor and department
0-6 credits, S/U grading

ITL 495 Senior Honors Project in Italian
A one-semester project for seniors. Arranged in consultation with the department, the project involves writing a paper, under the close supervision of an appropriate instructor, on a suitable topic. Students who are candidates for honors take this course.
Prerequisite: Permission of department
3 credits
ITS 101 Introduction to Stony Brook
A seminar intended to integrate students into the Undergraduate College of Information and Technology Studies and into the University community by providing information about Stony Brook and a forum for discussion of values, intellectual and social development, and personal as well as institutional expectations. Required for all first year students. Not for credit in addition to ACH 101, LDS 101, GLS 101, HDV 101, SSO 101, SBU 101, LHD 101, and LSE 101.
1 credit, S/U grading

ITS 102 Topics in Information and Technology Studies
A seminar for students in the College of Information and Technology Studies. Various topics within the scope of information, technology, and engineering studies. Required for all first year students. Not for credit in addition to ACH 102, GLS 102, HDV 102, LDS 102, or SSO 102.
Prerequisite: Admission to the ITS Undergraduate College
1 credit, ABC/U grading
JDH 230-G Judaism
A survey of the great texts of the Judaic heritage, with the aim of learning the contribution of each to the Jewish tradition. The course includes an examination of characteristic Jewish beliefs, practices, and attitudes. This course is offered as both JDH 230 and RLS 230.
3 credits

JDH 261-B The Bible as Literature
A literary approach to the Bible that explores the characteristic principles of the Bible’s narrative and poetic art. This course is offered as both EGL 261 and JDH 261.
Prerequisite: Completion of D.E.C. category A
3 credits

JDH 320-G The Rabbinic Tradition
The origin and development of the Rabbinic tradition, examination of the chief elements of Rabbinic teaching at various times, and analysis of the major types of Rabbinic literature. This course is offered as both JDH 320 and RLS 320.
Prerequisite: JDS/HIS 225 or 226 or JDH/RLS 230
3 credits

JDH 361-G Women in the Biblical World
Consideration of how we define, on the basis of biblical and other contemporaneous literature, women’s position in the socio-political sphere, including women in professions and institutions, such as goddesses, leaders of the community, queens, “wise women”, writers, prophetesses, magicians, and prostitutes; and examination of literary types such as the Wife (and concubine), the Mother, the Daughter, the Temptress, and the Ancestress. This course is offered as both JDH 361 and WST 361.
Prerequisite: One JDH or JDS or WST or literature course at the 200 level or higher
3 credits

JDH 369-G Topics in Biblical Interpretation
A study of some of the ways a selected book in the Hebrew Bible, a selection from the prophets, or another book, has been understood through history. The course examines traditional Christian interpretations in contrast with Rabbinic interpretations. Higher biblical criticism is discussed as a reflection of 19th-century historicism and science. Modern interpretations include psychoanalytic, structuralist, anthropological, and literary. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: JDH 230 or one literature course at the 200 level or higher
3 credits

JDH 390-G Humanities Topics in Judaic Studies
An examination of a selected topic in Judaic studies within the humanities area. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: JDS/HIS 225 or 226 or JDH/RLS 230
3 credits

JDH 415-G Judaic Response to Catastrophe
The response of Judaic thinkers, from the Bible to the Second World War, to the problem of historical disaster and the need to understand and respond to it. Particular attention is given to the question of long-term continuity and the appearance of innovation in such responses. This course is offered as both JDH 415 and RLS 415.
Prerequisite: JDS/HIS 225 or 226 or JDH/RLS 230
3 credits

JDH 447 Readings in Judaic Studies
Qualified juniors and seniors may read independently in the areas of Jewish religion, philosophy, and literature in an approved program under the supervision of a faculty member. May be repeated.
Prerequisite: Permission of instructor
1-6 credits
JDS

Judaic Studies in Social and Behavioral Sciences

JDS 225-J The Formation of the Judaic Heritage
Jewish history and the development of Judaism during the Persian, Hellenistic, and Roman periods (ca. 500 B.C.E.-ca. 500 C.E.). The course begins with the close of the Hebrew Bible, examines the varieties of Judaism which then arose, and ends with the consolidation of rabbinic Judaism on one hand and Christianity on the other. This course is offered as both HIS 225 and JDS 225.
Advisory Prerequisite: RLS 101 or 110 or one HIS course
3 credits

JDS 226-F The Shaping of Modern Judaism
The history of the Jews and of Judaism since the fall of the Roman Empire and the rise of Islam. The course concludes with a study of the Holocaust and the creation of the State of Israel, and includes a survey of the major forms of American Jewish life. This course is offered as both HIS 226 and JDS 226.
Advisory Prerequisite: RLS 101 or 110 or one HIS course
3 credits

JDS 241-I The Holocaust: The Destruction of European Jewry—Causes and Consequences
The rise of modern anti-Semitism since the late 18th century and its political application in Nazi Germany. Topics include the destruction process, ghetto life, resistance, foreign response, and the war crimes trials. This course is offered as both HIS 241 and JDS 241.
Advisory Prerequisite: JDS/HIS 226 or HIS 101 or 102
3 credits

JDS 327-F Women in Judaism
A survey of women in Judaism and in Jewish life from the Biblical period to the present, focusing on such topics as the representation of women in the Bible, Jewish law concerning women, the role of women in the Enlightenment in Germany and America, immigrant women in America, women in the Holocaust, and women in Israel. This course is offered as both JDS 327 and WST 320.
Prerequisite: One JDS or WST course
3 credits

JDS 390-F Social Sciences Topics in Judaic Studies
An examination of selected topics within the social and behavioral sciences area to be announced whenever the course is offered. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: JDS/HIS 225 or 226
3 credits

JDS 447 Readings in Judaic Studies
Qualified juniors and seniors may read independently in the areas of Jewish history, culture, and society, in an approved program under the supervision of a faculty member. May be repeated.
Prerequisites: Two JDS courses, or one course each in JDS and JDH; permission of director
1-4 credits
JPN

Japanese Language

JPN 111, 112 Elementary Japanese I, II
An introduction to spoken and written Japanese with equal attention to speaking, reading, and writing. Linguistic analysis of the characters provides cultural and historical background of the language. This course is designed for students who have no prior knowledge of the language. A student who has had two or more years of Japanese in high school (or who has otherwise acquired an equivalent proficiency) may not take JPN 111 or JPN 112 without written permission from the supervisor of the course.
Prerequisite: JPN 112

JPN 211 Intermediate Japanese I
An intermediate course in Japanese language to develop audiolingual skills and reading and writing ability. Selected literary texts serve as the basis for practice in reading comprehension and composition. A student who has had three or more years of Japanese in high school (or has otherwise acquired an equivalent proficiency) may not enroll in JPN 211 without written permission from the supervisor of the course.
Prerequisite: JPN 112

JPN 212 Intermediate Japanese II
An intermediate course in Japanese language to develop audiolingual skills and reading and writing ability. Selected literary texts serve as the basis for practice in reading comprehension and composition. A student who has had three or more years of Japanese in high school (or has otherwise acquired an equivalent proficiency) may not enroll in JPN 212 without written permission from the supervisor of the course.
Prerequisite: JPN 211

JPN 311, 312 Advanced Japanese I, II
An advanced course designed to strengthen students’ ability to understand and speak the Japanese language. Students are required to prepare selected texts and to read and translate them in class. They also write essays based on the texts as well as on Japanese videos.
Prerequisite to JPN 311: JPN 212
Prerequisite to JPN 312: JPN 311

JPN 331-F Social Sciences Topics in Japanese Studies
An investigation of a specific area of Japanese studies in the social and behavioral sciences. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. Previously offered as JNS 331.
Prerequisite: U3 or U4 standing
Advisory Prerequisites: Two courses in Asian studies

JPN 332-G Humanities Topics in Japanese Studies
An investigation of a specific area of Japanese studies in the humanities. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. Previously offered as JNH 331.
Prerequisite: U3 or U4 standing
Advisory Prerequisites: Two courses in Asian studies

JPN 447 Independent Study
Directed reading and research in Japanese studies. Limited to Japanese studies minors or upper-division students working on advanced problems in Japanese studies. May be repeated. Previously offered as JNH and JNS 447.
Prerequisites: U3 or U4 standing; permission of instructor
1-6 credits
JRN

Journalism

JRN 101-B News Literacy
How do you know if you’re getting the truth from the news media? This course is designed to prepare stu-
dents to become more discriminating news con-
sumers. It will examine standards of reliability and
accuracy in news gathering and presentation, and
seek to establish the differences between news and
propaganda, assertion and verification, bias and fair-
ness, and infotainment and journalism. Students will
be encouraged to critically examine news broadcasts,
newspaper articles and Web sites. Visiting journalists
will be questioned about the journalistic process and
decision-making. Previously offered as a topic to EGL
390-G (spring 2006). Not for credit in addition to EGL
390 with that topic.

3 credits

JRN 102 Colloquium on the News
This course is designed to introduce students to the
journalistic process and expose them to some of the
leading newsmakers in the area. Students will be
expected to do research on timely issues in the news
and prepare questions for visitors who will conduct
periodic press conferences. Students will be expected
and will participate in research and interviewing skills, as well
as develop an appreciation of current news issues.
Previously offered as JRN 285. Not for credit in addi-
tion to JRN 285.

1 credit

JRN 108-F The History and Future of the American Press
This course traces the history of the American press
from pre-American Revolution to post-Internet revolu-
tion. It examines the role of the press in society, and
the economic, political, and military forces that shaped
the news media and how the press, in turn, influenced American government, poli-
tics and society. Topics will include freedom of the
press, the rise of the popular press, war and the press,
the press and presidents, the impact of investigative
journalism, the evolution of radio and TV news, and
the advent of 24/7 online news. Previously offered as
JRN 280. Not for credit in addition to JRN 280.

3 credits

JRN 110 News I: Basic News Reporting and Writing
An introduction to reporting and writing the news,
including defining what is newsworthy. This is a foun-
dation for all other courses in the journalism program.
Through weekly assignments students will develop a
mastery of the basic elements of writing a news story
that conforms to standards of clarity, accuracy and
fairness. An emphasis is placed on gaining practical
experience through reporting on classroom, campus
and community events. The development of basic
skills is accompanied by the exploration of the role of
the press in a free society. The course includes a
six-week immersion lab in grammar, punctuation and sen-
tence structure. Students who pass a proficiency test
will be exempt from the lab. All other students must
take the lab and pass the test to advance in the jour-
nalism program. Previously offered as JRN 287. Not
for credit in addition to JRN 287.
Pre requisite: Completion of D.E.C. category A
Composition

3 credits

JRN 201 Journalism That Changed the World
This course is designed to give students an appre-
ciation for the power of the press to work on behalf of
the public interest. It is designed as a case study course in
which students examine major, contemporary stories
in broadcast and print that have had a significant
impact on society. Included are case studies of
Watergate, coverage of the Civil Rights movement,
revealing of local corruption on Long Island, and
the disclosure of ethnic cleansing in Bosnia, among other
stories. Students will also be assigned to read, watch,
and study earlier examples of public service journal-
ism. Journalists who participated in the case studies
will visit class and discuss their stories.
Prerequisite: Completion of D.E.C. category A
Pre or Corequisite: JRN 101

3 credits

JRN 210 News II: Beat Reporting
Building on their work in JRN 110, students select and
develop a news beat, with an emphasis on finding sto-
ries, developing sources, interviewing, and research
methods. Students become better acquainted with
newspaper style, writing to a fixed word-length, using
numbers accurately, and writing on deadline. Previ-
ously offered as JRN 387. Not for credit in addi-
tion to JRN 387.
Prerequisite: JRN 110

3 credits

JRN 220 Media Law and Ethics
This course examines how journalists do their work
from the perspectives of legal and ethical parameters.
It will provide an introduction to the legal foundation
that supports freedom of the press and examine cur-
rent law on such subjects as source confidentiality,
access to documents, libel, and invasion of privacy.
Students will also examine ethical codes that guide
journalists, including standards regarding indepen-
dence, accountability, truth-telling, protecting
sources, and study conflicts that arise when journalis-
 tic principles clash with real-life dilemmas.
Prerequisite: JRN 110

3 credits

JRN 301 Journalism 24/7
This course examines the rapidly evolving media land-
scape and the implications for journalists and journal-
ists. Students examine the revolutionary changes in
digital technology, dramatically shifting patterns of
media consumption, rise of non-traditional competi-
tion, challenges of serving a more diverse audience,
and accelerating media consolidation, and explore
alternative visions for the impact on content, stan-
dards, business models, and jobs in the next decade.
Prerequisites: JRN 108 or 201; JRN 110

3 credits

JRN 310 News III: Reporting and Writing
for Broadcast
Students learn to report and write news stories for
radio and television. Students will become acquainted
with the proper use of sounds and visuals in broadcast
reporting and learn how to write news scripts to time.
Class is held in a production/workshop environment.
Additional hours in television studio and editing facili-
ties are required.
Prerequisite: JRN 210

3 credits

JRN 320 The Promise and Perils of Online Journalism
This course examines the challenges presented by the
explosion of journalism on the Internet and assesses
the role of the journalist in an online society. Students
are exposed to both practical skills and a broader
understanding of issues. Topics include how journal-
ists add value to information online, writing and edit-
ing for the Web, the use of interactive tools, blogs and
podcasts, and an elementary understanding of Web
design. At the same time, students explore issues of
privacy, the Internet’s potential threat to traditional
journalistic standards, and how online publishing is
creating new audiences. Students will critique news
Web sites, participate in a blog and podcast, create a
news Web page, and produce an online story package.
Course includes two lectures and a weekly three-hour
lab in the use of digital tools.
Prerequisites: JRN 210 and 301

3 credits

JRN 331 Specialized Beat Reporting (Government)
Students become acquainted with the skills and
knowledge necessary to become a specialist in the
area of government and public affairs reporting. In
seminar format students meet and question broadca-
stand and print beat reporters in the areas of government,
politics, the courts, police, and education. Four class
sessions meet at SBU Manhattan campus. Students
may participate via video conferencing to the main
campus. Note: This class is only offered in the fall
semester. Students may take either JRN 331 or JRN
332, but not both, to satisfy a requirement of the major.
Prerequisite: JRN 310
Advisory prerequisite: POL 367

3 credits

JRN 332 Specialized Beat Reporting (Culture and Lifestyle)
Students become acquainted with the skills and
knowledge necessary to become a specialist in the
areas of culture, arts and lifestyle and sports. In semi-
nar format students meet and question beat reporters
in the areas of film, theater, art, fashion, food, archi-
 

JRN 333 Business Reporting
This course provides practical training for journalism
students interested in a possible career in business
reporting. It seeks to provide the basic understanding
and skills to report on business and consumer news
and economic trends. Goals include learning how to
research and understand financial statements, how to
identify and access relevant public documents, and
how to interpret basic economic data and statistics.
Students profile a public company on Long Island or in
New York City, and learn how to write a business
story that conforms to standards of accuracy and con-
text. They will be encouraged to visit major financial
institutions, public markets, and regulatory agencies
in New York City. Students will also examine business
stories and controversies in the news from the per-
spective of the business community and journalists.
Prerequisite: JRN 310
Advisory Prerequisites: ECO 108 and BUS 110

3 credits

www.stonybrook.edu/ugbulletin

441
JRN 337 Introduction to Narrative Journalism
Building on students' experiences in newswriting, this course examines the reporting and writing of longer stories and more textured feature stories. There will be an emphasis on focus, structure, and storytelling, including the rudiments of developing style and a narrative voice. Students will be expected to write several original enterprise stories. They will also explore the similarities and differences in telling stories in print, online, and in broadcast formats. Previously offered as JRN 288. Not for credit in addition to JRN 288 "Feature Writing" that was offered prior to Fall 2006.
Prerequisite: JRN 210
Advisory Prerequisite: EGL 399 (Special Topics: Journalists as Novelists)
3 credits

JRN 350 The Principles of Editing
This course examines the fundamentals of editing, for all media, with emphasis on critical thinking, maximizing accuracy, removing bias, and providing context. Students will practice editing for print, broadcast, and online before completing a culminating project involving editing the same story across three different platforms.
Prerequisites: JRN 310 and 320
3 credits

JRN 388 Advanced Feature and Magazine Writing
A continuation of JRN 337 (or the former JRN 288) with emphasis on longer newspaper features and magazine articles. Discussion focuses on how to research stories, manage material, and organize publishable pieces of 1000-2000 words. Students are expected to read widely in daily press and periodicals.
Prerequisite: JRN 337 (formerly 288)
3 credits

JRN 389 Investigative Reporting
An advanced course in the reporting and writing of investigative and complex stories. Emphasis is placed on independent field research, types of proof, confrontational interviews, and the organization and writing of longer stories and story series for publication. The course deals with ethical problems, libel, and invasion of privacy.
Prerequisite: JRN 210 (formerly 387)
3 credits

JRN 394 Journalism Practicum
Classroom practice in selecting and laying out stories for a front page. The course also covers such media topics as typography, the operation of editorial boards, op-ed articles, wire services, TV news, books, the music business, the history of journalism, and the foreign press.
Prerequisite: JRN 110 (formerly 288) or 337 (formerly 288)
3 credits

JRN 395 News Editing
Editing copy for grammatical correctness, consistency, accuracy, tightness, and brightness; writing headlines. The course also considers the broader aspects of editing, such as assigning stories and handling writers sensitive about their copy.
Prerequisite: JRN 110 (formerly 287)
3 credits

JRN 487 Independent Study
Intensive study of a special topic undertaken with close faculty supervision. May be repeated.
Prerequisites: Permission of instructor and director of undergraduate studies
0-6 credits, S/U grading

JRN 488 Internship
Students work at local, state, and national newspapers and magazines. The work must involve journalistic skills related to the educational goals of the department.
Prerequisites: 12 credits of journalism courses; 2.50 g.p.a.; permission of instructor and director of undergraduate studies
0-6 credits, S/U grading

Spring 2007: updates since Fall 2006 are in red
KOR

Korean

KOR 111, 112 Elementary Korean I, II
An introduction to spoken and written Korean with equal attention to speaking, reading, and writing. Fundamental communication skills are acquired through intensive study of basic grammar and pronunciation. This course is designed for students who have no prior knowledge of the language. A student who has had two or more years of Korean in high school (or who has otherwise acquired an equivalent proficiency) may not take KOR 111 or KOR 112 without written permission from the supervisor of the course.
Prerequisite to KOR 112: KOR 111
4 credits per course

KOR 211, 212 Intermediate Korean I, II
Intermediate courses in Korean language to develop audiolingual skills and reading and writing ability. Through the introduction of complex grammatical structures and idioms, speaking, reading, and writing ability in Korean language is further developed.
Prerequisite to KOR 211: KOR 112 or placement test
Prerequisite to KOR 212: KOR 112 or placement test
3 credits per course

KOR 311 Advanced Korean
An advanced course designed for students who wish to enhance reading comprehension and writing ability in Korean. Reading materials are selected from modern Korean literature, journals, and newspapers. Students are trained in samples of various writing styles. Emphasis is also placed on the idiomatic usage of Korean language and the relation of Korean to Chinese characters.
Prerequisite: KOR 112 or placement test
3 credits

KOR 331-F Social Science Topics in Korean Studies
An investigation of a specific area of Korean studies in the social and behavioral sciences. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. Previously offered as KRS 331.
Prerequisite: U3 or U4 standing
Advisory Prerequisites: Two courses in Asian studies
3 credits

KOR 332-G Humanities Topics in Korean Studies
An investigation of a specific area of Korean studies in the humanities. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. Previously offered as KRH 331.
Prerequisite: U3 or U4 standing
Advisory Prerequisites: Two courses in Asian studies
3 credits

KOR 351 Studies in Korean Literature
A detailed study of a particular author, genre, period, or topic in Korean literature. The readings, class discussions, and students' written assignments are in Korean. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: KOR 311
Advisory Prerequisite: One additional Asian studies course
3 credits

KOR 447 Independent Study
Directed reading and research in Korean studies. Limited to Korean studies minors or upper-division students working on advanced problems in Korean studies. May be repeated. Previously offered as KRH and KRS 447.
Prerequisites: U3 or U4 standing; permission of instructor
1-6 credits
LAC

Latin American and Caribbean Studies

LAC 200-J Introduction to Latin American and Caribbean Societies
Introduction to social science, historical, and cultural perspectives on Latin America and the Caribbean, as well as on Latino communities in the United States. The goal is to develop a critical and broad understanding of Latin America’s social and historical problems and challenges and an appreciation of the region’s economic and cultural contributions.
Advisory Prerequisites: One D.E.C. category F course; one D.E.C. category B or G course
3 credits

LAC 380 Topics in Latin American Studies
Semester supplements to this Bulletin contain specific description when course is offered. Topics may include titles such as Literature of the Dominican Republic; and Latinas: History, Society, and Culture. Designed for upper-division students, this course provides an in-depth study of a specific topic relating to non-Western world civilizations. Students will be expected to demonstrate either a knowledge of a broad outline of world history, or the distinctive features of the history, institutions, economy, society, and culture of one non-Western civilization. May be repeated for credit as the topic changes.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: LAC 200
3 credits

LAC 487 Independent Research in Latin American and Caribbean Studies
Supervised research with faculty in the Latin American and Caribbean Studies program. Students develop their own research projects under the supervision of a faculty member or assist with a faculty member’s own research. May be repeated to a limit of six credits.
Prerequisites: 15 credits toward the Latin American and Caribbean studies minor; permission of instructor
0–6 credits

LAC 488 Internship
Volunteer work in community, research organizations, or cultural centers relating to Latin American or Latino affairs, arranged in consultation with the LACC director. Current list of intern opportunities available at the LACC, Social and Behavioral Sciences building, N-233.
Prerequisites: 15 credits in LAC studies; permission of instructor and director
0–6 credits, S/U grading

LAC 490 Senior Seminar in Latin American and Caribbean Studies
A small thematic interdisciplinary seminar integrating students’ broader college experience in Latin American and Caribbean courses. Themes vary depending on instructor.
Prerequisite: 15 credits toward the minor in Latin American and Caribbean Studies
3 credits
LAN

Uncommonly Taught Languages

LAN 111, 112 Uncommonly Taught Language (Elementary) I, II
An introduction to a language not offered elsewhere in the University; speaking, comprehension, reading, and writing. Selected texts are read. Practice in the language laboratory supplements class work. May be repeated for different languages. This course is designed for students who have no prior knowledge of the language. A student who has had two or more years of the offered language in high school (or who has otherwise acquired an equivalent proficiency) may not take LAN 111 or LAN 112 in that language without written permission from the supervisor of the course.
Prerequisite to LAN 112: LAN 111
3 credits per course

LAN 211, 212 Uncommonly Taught Language (Intermediate) I, II
Continued study of a language not offered elsewhere in the University; advanced speaking, comprehension, reading, writing, and grammar. Selected texts are read. Practice in the language laboratory supplements class work. May be repeated for different languages. A student who has had four years of the offered language in high school (or who has otherwise acquired an equivalent proficiency) may not take LAN 211 in that language without written permission from the supervisor of the course.
Prerequisite to LAN 211: LAN 112
Prerequisite to LAN 212: LAN 211
without written permission from the supervisor of the course.
3 credits per course

LAN 447 Directed Readings in Uncommonly Taught Languages
Intensive study of an uncommonly taught language arranged in consultation with a faculty member.
Prerequisite: Permission of instructor
1-6 credits

LAN 475, 476 Practica in Language Teaching I, II
Proficient speakers of selected languages have an opportunity to learn techniques of language teaching or linguistic analysis by assisting a master teacher in small tutorial sections. Students meet at least weekly with their faculty supervisors to discuss teaching strategies and problems encountered.
Prerequisites to LAN 475: LIN 101; fluency in the language being taught; U3 or U4 standing; permission of instructor.
Prerequisites to LAN 476: LAN 475; fluency in the language being taught; permission of instructor.
3 credits per course, S/U grading
LAT

Latin

LAT 111, 112 Elementary Latin I, II
Designed to prepare the beginning student to translate Latin that may be needed for use in undergraduate or graduate study. Focus of the course is on the fundamentals of grammar and techniques of translation. LAT 111 is designed for students who have no prior knowledge of the language. A student who has had two or more years of Latin in high school (or who has otherwise acquired an equivalent proficiency) may not take LAT 111 without written permission from the course supervisor.
Prerequisite to LAT 112: LAT 111
3 credits per course

LAT 251, 252 Readings in Latin
Literature I, II
Readings in classical Latin literature of the Republic. The course includes a brief intensive review of grammar, Latin prose composition, and the sampling of a number of authors including Catullus, Cicero, Virgil, and Livy.
Prerequisite to LAT 251: LAT 112
Prerequisite to LAT 252: LAT 251
3 credits per course

LAT 353 Literature of the Roman Republic
Selected works of Cicero, Lucretius, and Catullus are translated and examined in their social and historical context. The reading of critical works in English may also be required.
Prerequisite: LAT 252
3 credits

LAT 354 Literature of the Roman Empire
Selected works of Virgil, Horace, Petronius, Tacitus, and Juvenal are translated and examined in their social and historical context. The reading of critical works in English is also required.
Prerequisite: LAT 252
3 credits

LAT 355 Early Medieval Latin
Translation and discussion of Christian and secular Latin literature from the 4th to the 12th century. The course includes an intense review of Latin grammar and an outline of the changes in the language that took place during early medieval times. Selections from the Vulgate and the writings of Jerome, Augustine, Bede, and others are translated and discussed.
Prerequisite: LAT 252
3 credits

LAT 356 Late Medieval Latin
Translation and discussion of Latin literature from the 12th to the 16th century. Authors include the Archpoet, Thomas Aquinas, Petrarch, Erasmus, and Thomas More.
Prerequisite: LAT 252
3 credits

LAT 447 Directed Readings in Latin
Intensive study of a particular author, period, or genre of Latin literature in the original under close faculty supervision. May be repeated.
Prerequisite: Permission of director of the classics minor
1-6 credits

LAT 475 Undergraduate Teaching Practicum
Work with a faculty member as an assistant in one of the faculty member's regularly scheduled classes. The student is required to attend all the classes, do all the regularly assigned work, and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. The student will be available to students in the class who may need more explanations than class time allows.
Prerequisites: U3 or U4 standing; permission of instructor and department
3 credits, S/U grading
Living Learning Center in Community Service Learning

LCR 200-F The Nature of Community
The course examines the nature of human communities, their conceptualization, definition, and dynamics while providing an introduction to service learning strategies. Exploring issues such as organization and leadership, hierarchy and stratification, students examine the notion of community formation through processes of exchange and reciprocity, institutionalization, alienation and solidarity, marginalization, and empowerment.
3 credits

LCR 201 Methods for Social Action Research
An introduction to basic methods of community action research. Students develop a fundamental set of “fieldwork” skills, learning to apply their academic knowledge in the service of community-based initiatives for social change. Covering theoretical, methodological, ethical, and legal issues, students conduct a series of field assignments to master key concepts in research design, implementation, and analysis.
3 credits

LCR 487 Directed Research in Community Service Learning
Independent research projects under the supervision of a faculty member. May be repeated once.
Prerequisite: Permission of instructor and program director
0-6 credits

LCR 488 Internship in Community Service Learning
Student teams work in specific communities, applying their academic, intellectual, and technical skills to address community concerns. Working with local community members to develop effective plans for community action, students engage in service learning. May be repeated to a limit of 12 credits.
Prerequisites: LCR 200; LCR 201; permission of director of the minor
0-6 credits, S/U grading

LCR 490 Senior Seminar in Community Service Learning
A capstone seminar for the minor in Community Service Learning. The course is designed to bring together students completing the minor and relevant community members to reflect on the nature of the research projects carried out and their expected consequences. An independent project is developed with the faculty director.
Prerequisites: LCR 488; permission of director of the minor
3 credits
LDS

Leadership and Service

LDS 101 Introduction to Stony Brook
A seminar intended to integrate students into the Undergraduate College of Leadership and Service and into the University community by providing information about Stony Brook and a forum for discussion of values, intellectual and social development, and personal as well as institutional expectations. Required for all first year students. Not for credit in addition to ACH 101, GLS 101, HDV 101, ITS 101, SSO 101, SBU 101, LHD 101, and LSE 101.
1 credit, S/U grading

LDS 102 Undergraduate College Seminar: Leadership and Service
A seminar for all first-year students in the Undergraduate College of Leadership and Service. Seminar topics vary annually by section and cover a variety of subjects under the general scope of Leadership and Service. Required for all first year students. Not for credit in addition to ACH 102, GLS 102, HDV 102, ITS 102, or SSO 102.
Prerequisite: Admission to the LDS Undergraduate College
1 credit, ABC/U grading
LHD

Living Learning Center in Human Sexual and Gender Development

LHD 101 Human Development Seminar
An introduction to human sexual and gender development issues. The course focuses on topics relevant to the campus experience—e.g., male and female roles in the classroom, college students and the crisis of AIDS and sexually transmitted diseases, and sexual orientation. These issues are examined from an interdisciplinary perspective.
Prerequisite: Permission of minor coordinator required for students who do not reside in Eisenhower College
1 credit

LHD 301 Human Sexual and Gender Development Issues
An examination of the human life cycle—infancy and childhood, youth and adolescence, mid-life and aging—with regard to gender and sexual self-concepts. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
1 credit

LHD 302 Colloquium in Human Sexual and Gender Development
Sexual and gender development issues such as sexual orientation, gender development in children, and the childbirth experience. Semester Supplements to this Bulletin contain description when course is offered. May be repeated once as the topic changes.
1 credit

LHD 305, 306 HIV Reduction in the Campus Context
First course of a two-semester sequence addressing issues of HIV transmission and risk reduction, including identifying opportunities to discuss risk and promote risk reduction, and supporting the process of behavior change. Examination of the history of the AIDS epidemic in the U.S. and around the world.
Prerequisites to LHD 305: Permission of instructor
Corequisites to LHD 305: LHD 306, LHD 307
Prerequisites to LHD 306: LHD 305 and 307; permission of instructor
Corequisite to LHD 306: LHD 308
2 credits per course

LHD 307, 308 Laboratory in HIV Reduction in the Campus Context
A forum for discussion of the application of material learned in LHD 305 and 306. The course focuses on the development of skills necessary to accomplish education and behavior changes among the peers of course participants, and monitors individual progress toward that end.
Prerequisite to LHD 307: Permission of instructor
Corequisite to LHD 307: LHD 305
Prerequisites to LHD 308: LHD 305 and 306; permission of instructor
Corequisite to LHD 308: LHD 306
1 credit per course, S/U grading

LHD 401 Advanced Seminar in Human Sexual and Gender Development
Consideration of human sexual and gender development issues through examination of primary source material. Semester Supplements to this Bulletin contain description when course is offered. May be repeated once as the topic changes.
1 credit

LHD 402 Parenting Children in the Next Generation
A sociological examination of the evolution of parenting in the post-World War II era. Topics covered include the sociology of childhood, the sociology of the family, parent and child development and parenting responsibilities, and parenting challenging children.
Prerequisite: LHD 301
3 credits

LHD 475, 476 Undergraduate Teaching Practica I, II
Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled classes. The student is required to attend all the classes, do all the regularly assigned work, and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. In LHD 476, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice.
Prerequisites to LHD 475: LHD 487; U3 or U4 standing; permission of instructor and director of the minor
Prerequisites to LHD 476: LHD 475; permission of instructor and director of the minor
3 credits per course, S/U grading

LHD 487 Independent Study in Human Sexual and Gender Development
The completion of an individual project by one student or a group of students on human sexual and gender development and the life course. Projects must include both library and field research, or a literary or artistic endeavor. May be repeated once.
Prerequisites: LHD 101 or 301; LHD 302; permission of director of the minor
0-3 credits

LHD 488 Internship
Participation in public and private agencies and organizations. May be repeated up to a limit of 6 credits.
Prerequisite: Permission of director of the minor or instructor
0-6 credits, S/U grading

www.stonybrook.edu/ugbulletin 449
LHW

Living Learning Center in Health and Wellness

LHW 102 Introductory Seminar to the Health Professions
An exploration of the scope of practice for selected health professions. The course includes seminars by invited speakers in the health professions. Students are required to actively investigate several similar professions to better understand similarities and differences. Professions explored include medicine, nursing, dentistry, physical therapy, occupational therapy, clinical laboratory sciences, respiratory care, and physician assistant. Not for credit in addition to HAS 190.
1 credit

LHW 301 Issues in Health and Wellness
An investigation of selected topics in health and wellness, chosen by the class as a whole. Students are required to actively investigate their chosen area and present their findings to the class. Topics are determined through class discussion, individual investigation, and mutual consent.
3 credits

LHW 488 Internship in Health and Wellness
An experience in health and/or wellness promotion, prevention, and/or education. Students learn about contemporary issues in health and wellness through hands-on work with faculty mentors and on- and off-campus health and wellness professionals. May be repeated up to a limit of 6 credits.
Prerequisites: LHW 301; permission of director of the minor
0-6 credits, S/U grading
Living Learning Center in Interdisciplinary Arts

LIA 101-D Introduction to the Interdisciplinary Arts
An exploration of the interdisciplinary and collaborative nature of the fine arts. The course traces the general development of the arts from their common practical origins in basic communication, ritual, and decoration to the present, and examines how these factors unify the arts in modern culture and society. Students develop in-class presentations using multiple art forms.
3 credits

LIA 102 Opportunities in the Arts
An introductory seminar concerning career opportunities in the arts. Students meet once a week for discussion, networking, establishing career strategies, career planning, and investigations of continued study. Guest lecturers discuss their area of expertise in relation to career opportunities for students entering the field.
1 credit

LIA 401 Senior Seminar
An intensive investigation of theatre theorists with particular emphasis on the application of theory to practice. This course is offered as both LIA 401 and THR 401.
Prerequisites: U4 standing; permission of instructor
3 credits

LIA 487 Independent Research in Interdisciplinary Arts
The completion of a group-generated or individual creative project under the supervision of an instructor. May be repeated to a limit of 6 credits.
Prerequisites: LIA 101; any 200-level art, dance, music, or theatre course; permission of instructor and director of the minor
0-6 credits

LIA 488 Internship in Arts Management
Study of the field of arts management, including public relations, scheduling, resource coordination, and community interaction. Practical work with management of the annual Shirley Strum Kenny Student Arts Festival.
Prerequisite: Permission of director of the minor
0-6 credits, S/U grading
LIN 301 Phonology
An introduction to the sound systems of languages focusing on the mental representation of sound structure; how speakers use knowledge of their languages to assign meaning to different combinations of sounds. We will examine data from a number of languages to explore the differences and similarities among the sound patterns of different languages, and will consider the question of whether there are universal preferences for specific types of sounds and sound sequences.
Prerequisite: LIN 201
3 credits

LIN 307-K Sociolinguistics
An examination of the interaction between language and society, focusing on diversity in American English as it relates to differences in gender, geography, social class, ethnicity, and national origin. Study of the development of dialects including African American Vernacular English, and pidgins and creoles such as Hawaiian Pidgin English and Chinkook Trade Jargon, within the context of historical developments in the U.S. from colonial times to the present.
Prerequisite: LIN 101 or 102
Advisory Prerequisite: Completion of D.E.C. categories I and J
3 credits

LIN 330 Language Acquisition
Introduction to the field of language acquisition. Issues include cognitive processes, role of innate ability and environment, developmental stages, individual variation, universal tendencies, interaction of language and cognition, bilingualism, similarities and differences between first- and second-language acquisition, and language disorders.
Prerequisite: LIN 201 and 211
3 credits

LIN 340 Historical Linguistics
The application of linguistic theory to the ways in which sound systems, word structure, and sentence structure change. Students learn how linguists establish that certain languages are related, and how they reconstitute prehistoric parent languages.
Prerequisite: LIN 211 and 301
3 credits

LIN 344 Literacy Development
An introduction to the theories of literacy and language development of native English speakers and students who are English language learners in preschool through grade 12. Students acquire knowledge in the development of literacy skills among children of different developmental and ability levels and develop learning experiences that integrate literacy skills and assessment across all disciplines. Attention is given to children with special needs and the integration of technology in the development of literacy skills. Not for major credit.
Prerequisite: Enrollment in a teacher education program
3 credits

LIN 345-J Writing Systems of the World
A survey of the major types of writing including (but not limited to) alphabetic, syllabic, and logographic systems; the invention of writing; changes in writing systems over time and the decipherment of ancient writing. Special attention is given to modern English spelling, including both its regular, systematic properties and the historical background of its irregularities.
Prerequisite: LIN 101 or 201 or satisfaction of Skill 3 Elementary Foreign Language Competence
3 credits

LIN 346-F Language and Meaning
An exploration of semantics, the study of linguistic meaning. The course examines fundamental issues including the nature of meaning, its relation to word and sentence form (morphology and syntax), its relation to systems of mental representation (cognition), and the interaction between meaning and use (pragmatics). Recent research into the ways that linguistic meaning is acquired and how it is deployed in speech and understanding is discussed.
Prerequisite: LIN 101 or 211
3 credits

LIN 355-J Language and Life in a Selected Area of the World
Study of the languages of a selected country or region outside of Europe in relation to its society, culture, history, and politics. Topics include language family, social varieties, status and attitudes, language policies, and cultural patterns reflected in language use. Semester supplements to this Bulletin contain specific description when course is offered.
May be repeated for credit as the topic changes.
Advisory Prerequisite: LIN 101
3 credits

LIN 356-I Topics in Language and Life in Europe
Focus will be on the language of a particular country or region in Europe and the relationship between language and the society, culture, history, and politics of the country or region. Semester supplements to this Bulletin contain specific descriptions when course is offered. (i) how language shapes ways of speaking; (ii) how language constructs identities, dispositions, role relations; and (iii) what challenges people from different cultures may face when they communicate with each other. The following analytical perspectives will be presented: speech act theory, ethnography of communication, linguistic politeness, and sequential organization of turn taking. This course is offered as both AAS 370 and LIN 370.
Prerequisite: One previous course in D.E.C. J or one previous course in Linguistics.
3 credits

LIN 370-J Intercultural Communication
Through combination of theory and research from discourse linguistics and linguistic anthropology, this course examines (i) how culture shapes ways of speaking; (ii) how language constructs identities, dispositions, role relations; and (iii) what challenges people from different cultures may face when they communicate with each other. The following analytical perspectives will be presented: speech act theory, ethnography of communication, linguistic politeness, and sequential organization of turn taking. This course is offered as both AAS 370 and LIN 370.
Prerequisite: One previous course in D.E.C. J or one previous course in Linguistics.
3 credits

LIN 375 TESOL Pedagogy: Theory and Practice
Introduction to language and literacy instruction, instructional approaches, and assessment models for the teaching of speaking, listening, reading, and writing. Students design standard-based lessons and evaluate resources and technologies.
Prerequisites: Declared major in Linguistics; C or higher in one of LIN 101, 201, or 211; g.p.a. of 2.75 or higher; for non-native speakers of English, a SPEAK test score of 50 or higher
Corequisite: LIN 449
3 credits

LIN 378 Content-Based Language and Literacy Development
Introduction to language and literacy development across disciplines and to assessment, cooperative learning, and reflective practices. Students will develop standard-based interdisciplinary thematic
units, integrate technologies, and explore collaborative practices.

**Prerequisite:** LIN 375

**Corequisite:** LIN 450

3 credits

**LIN 425, 426, 427 Special Topics in Linguistics**

Seminars for advanced linguistics students. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.

**Prerequisite:** Varies with subject matter

3 credits per course

**LIN 431 The Structure of an Uncommonly Taught Language**

An investigation of the phonology and syntax of either a language or a family of languages. May be repeated if a different language is covered.

**Prerequisite:** LIN 211

Pre or Corequisite: LIN 301

3 credits

**LIN 447 Directed Readings in Linguistics**

Qualified juniors and seniors in linguistics are offered an opportunity to do independent work on topics in linguistics under guidance of a faculty member. May be repeated.

**Prerequisite:** Permission of department

1-6 credits

**LIN 449, 450 Field Experience, Grades N-12**

Observation, inquiry, and practice in language and literacy development across disciplines for learners from linguistically and culturally diverse backgrounds. Students are placed in variety of educational settings in elementary and secondary schools for 50 hours of fieldwork. Satisfactory/Unsatisfactory grading.

**Prerequisites:** Admission to the Linguistics Teacher Education Program; C or higher in one 200-level linguistics course; two years of a language other than English; minimum GPA 2.75

Corequisite to LIN 449: LIN 375

Corequisite to LIN 450: LIN 378

1 credit per course, S/U grading

**LIN 451 Supervised Student Teaching in English as a Second Language: Primary Grades N-6**

Supervised practice teaching in English as a second language by arrangement with selected Boards of Cooperative Educational Services and primary, middle, and secondary schools. Applications must be filed in the academic year preceding that in which the student plans to take the course.

**Prerequisites:** Linguistics major; 3.00 g.p.a. in major; 2.75 g.p.a. overall; NY teacher certification exams LAST and ELPA; 55 or higher on SPEAK or TSE, or comparable score on recognized standardized test of spoken English

**Corequisites:** LIN 452 and 454

6 credits, S/U grading

**LIN 452 Supervised Student Teaching in English as a Second Language: Secondary Grades 7-12**

Supervised practice teaching in English as a second language by arrangement with selected Boards of Cooperative Educational Services and middle and secondary schools. Applications must be filed in the academic year preceding that in which the student plans to take the course.

**Prerequisites:** Linguistics major; 3.00 g.p.a. in major; 2.75 g.p.a. overall; NY teacher certification exams LAST and ELPA; 55 or higher on SPEAK or TSE, or comparable score on recognized standardized test of spoken English

**Corequisites:** LIN 451 and 454

6 credits, S/U grading

**LIN 454 Managing Instruction, Assessment, and Resources**

Examination of effective practices, assessments, and technologies for developing language and literacy across content areas in multi-level classrooms. Collaboration with colleagues, parents, and communities is explored.

**Prerequisites:** C or higher in LIN 378; NY teacher certification exams LAST and ELPA; 55 or higher on SPEAK or TSE, or comparable score on recognized standardized test of spoken English

**Corequisites:** LIN 451 and 452

3 credits

**LIN 464 Morphology and Word Formation**

The internal structure of complex words. A variety of analytical methods is introduced, together with examples from English and many other languages.

**Prerequisites:** LIN 211 and 301

3 credits

**LIN 475, 476 Undergraduate Teaching Practica I, II**

Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled classes. The student in required to attend all the classes, do all the regularly assigned work, and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. In LIN 476, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice. Not for major credit.

**Prerequisites to LIN 475:** Linguistics major; U3 or U4 standing; permission of instructor.

**Prerequisites to LIN 476:** LIN 475; permission of instructor

3 credits per course, S/U grading

**LIN 478 Directed Research in Linguistics**

Qualified advanced undergraduates in linguistics may carry out individual research projects under the direct supervision of a faculty member. May be repeated up to a limit of six credits.

**Prerequisite:** Permission of department

0-6 credits

**LIN 488 Internship**

Participation in local, state, and national public and private agencies and organizations. May be repeated up to a total of 12 credits.

**Prerequisites:** 15 credits in linguistics; permission of department

0-6 credits, S/U grading

**LIN 495-496 Senior Honors Project in Linguistics**

First course of a two-semester sequence for linguistics majors who are candidates for the degree with honors. The project involves independent readings or research and the writing of a thesis. Students enrolled in LIN 495 are obliged to complete LIN 496 the next semester. Students receive only one grade upon completion of the sequence.

**Prerequisite:** Admission to the Linguistics Honors Program

3 credits per course
Learning Communities

LRN 104-G The Person
The first course in a two-semester sequence providing a broad cross-disciplinary approach to study in the humanities and social sciences, while laying the foundation for future academic success by fostering critical and conceptual skills through collaborative research projects. Issues associated with human identity and human values are examined in the context of modern social, psychological, and humanistic thought on learning, perception, cognition, and the self, including representations of the person and the self in literature and the arts.
Prerequisite: Enrollment in Freshman Learning Communities program
4 credits

LRN 105-F Ecology and Society
Second course of a two-semester sequence providing a broad cross-disciplinary approach to study in the humanities and social sciences, while laying the foundation for future academic success by fostering critical and conceptual skills through collaborative research projects. The course focuses on the variety of images of humanity’s relationship with the natural environment and examines the implications of these images for human society.
Prerequisite: Enrollment in Freshman Learning Communities program
4 credits

LRN 131-G Thinking About Science
First course of a two-semester sequence exploring the history and philosophy of science from a broad cross-disciplinary background, providing humanities and social sciences perspectives on the students' other courses while laying the foundation for future academic success by fostering critical and conceptual skills through collaborative research projects. The course considers questions about the nature and scope of scientific method, as well as the ethical and political issues that emerge when science is considered as a social institution.
Prerequisite: Enrollment in Freshman Learning Communities program
4 credits

LRN 132-F Thinking About Biology
Second course of a two-semester sequence exploring the history and philosophy of science from a broad cross-disciplinary background, providing humanities and social sciences perspectives on the students' other courses while laying the foundation for future academic success by fostering critical and conceptual skills through collaborative research projects. The course focuses specifically on critical theoretical and social issues in the history and philosophy of biology.
Prerequisite: Enrollment in Freshman Learning Communities program
4 credits

LRN 134 Contemporary Issues in Medicine and Biology
A one-credit seminar focusing on contemporary issues in medicine and biology. May be repeated for credit as the topic changes.
Corequisite: WRT 102
1 credit

LRN 141-G Perspectives from the Humanities
The first course in a two-semester sequence for students participating in the Freshman Learning Communities interested in information technology. The course provides an interdisciplinary introduction to key methods and ideas in the humanities. Topics may include the varieties of knowledge, the nature of personal identity, ethics, aesthetics, and others.
Prerequisite: Enrollment in Freshman Learning Communities program
3 credits

LRN 142-H Technology in Social Perspective
The second of a two-semester sequence for students participating in the Freshman Learning Communities interested in information technology. The course focuses on case studies on the interaction of technology and society. Topics may include the history of technology, ideas of progress and growth, the influence of economics on technological development, environmental impacts, and others.
Prerequisite: Enrollment in Freshman Learning Communities program
3 credits
Living Learning Center in Science and Engineering

LSE 201 Opportunities in Science and Engineering
A survey of the various science and engineering disciplines. Guest speakers describe their respective fields of research and study and the opportunities for students entering the field today. The interdisciplinary nature of science and technology is emphasized. The course includes research laboratory tours and demonstrations.
1 credit

LSE 310-H Current Issues in Science and Engineering
A study of the issues and events that confront scientists and engineers today. Student presentations and student-led discussions cover such topics as ethics, social responsibilities, the environmental impact of technology, and the economics of research and technology.
3 credits

LSE 320-H Future Trends in Science and Engineering
A study of forecasts for developments in science and engineering in the 21st century and their predicted effects on society. Predictions about science and engineering from the early 20th century and their accuracy today. Readings and student-led discussion on essays written by leading scientists and engineers concerning predictions in their fields during the next century. Includes several presentations made by science and engineering faculty on their current research, focusing on the long-term effects of their research on their discipline and on society. Several research papers by students will be required.
Prerequisites: U3 or U4 standing; one course in science or engineering
3 credits

LSE 475 Undergraduate Teaching Practicum
Students work with the instructor in an LSE course in leading discussion sections, helping students improve research skills, or assisting with the educational program presented as part of coursework. Students meet regularly with the supervising instructor.
Prerequisites: U3 or U4 standing; permission of instructor and director of the minor
3 credits, S/U grading
MAE 301 Foundations of Secondary School Mathematics
A re-examination of elements of school mathematics, including topics in algebra, geometry, and elementary functions. Competence in basic secondary-level ideas and techniques are tested.
Prerequisites: MAT 200 and 211; admission to mathematics or applied mathematics secondary teacher education program
Corequisite: MAE 311
3 credits

MAE 302 Methods and Materials for Teaching Secondary School Mathematics
The goals of mathematics education, learning theories, mathematics curricula, lesson planning, evaluation and teaching strategies. Lesson plans are drawn up and presented to the group.
Prerequisites: MAE 301 and C or higher in MAE 311
Pre- or Corequisite: MAE 312
3 credits

MAE 311 Introduction to Methods of Teaching Secondary School Mathematics
Aspects of teaching mathematics on the secondary school level, including lesson designs based on the NCTM standards, cooperative learning, and technology in mathematics education. Students observe classes in middle school and high school settings.
Prerequisites: MAT 211; admission to mathematics or applied mathematics secondary teacher education program; department consent
Corequisite: MAE 301
3 credits

MAE 312 Micro-Teaching
Twice-weekly supervised classroom experience, tutoring, or working with small groups of students as a teacher’s aide.
Prerequisite: C or higher in MAE 311
Pre- or Corequisite: MAE 302
2 credits

MAE 330 Technology in Mathematics Education
Introduces students in the mathematics secondary teacher education program to techniques and requirements for effective use of technology in the mathematics classroom. Emphasis on projects. Use of graphing calculators and computer software such as Geometer’s Sketchpad.
Prerequisites: MAE 301 and 311
3 credits

MAE 412 Issues in Teaching and Learning in Collegiate Mathematics
Investigation of the issues involved in the teaching and learning of introductory collegiate mathematics. A supervised teaching internship of undergraduate mathematics accompanies this seminar.
Prerequisite: MAE 302
4 credits

MAE 447 Directed Readings in Mathematics Education
Tutorial studies in recent advances in mathematics education.
Pre- or Corequisite: MAE 312
1 credit

MAE 451 Supervised Teaching-Middle School Level Grades 7-9
Intensive supervised teaching in secondary schools. Students work in the school under the supervision of an experienced teacher.
Prerequisites: MAE 312; MAT 312, 319 and 360; AMS 310; permission of director of mathematics secondary teacher education program
Corequisites: MAE 452 and 454
6 credits, S/U grading

MAE 452 Supervised Teaching-High School Grades 10-12
Intensive supervised teaching in secondary schools. Students work in the school under the supervision of an experienced teacher.
Prerequisites: MAE 312; MAT 312, 319 and 360; AMS 310; permission of director of mathematics secondary teacher education program
Corequisites: MAE 451 and 454
6 credits, S/U grading

MAE 454 Student Teaching Seminar
Weekly discussions of teaching techniques and experiences, learning theory, curriculum content, and classroom problems.
Corequisites: MAE 451 and 452
3 credits
Mathematics Proficiency

MAP 101 Fundamentals of Arithmetic and Algebra
Arithmetic: fractions, decimals, and percent. Algebra: signed numbers, monomials, linear equations in one unknown, and word problems. This course is intended for students who have never studied algebra. Does not satisfy the entry skill in mathematics requirement or the D.E.C. category C requirement. Students who have otherwise satisfied D.E.C. category C may not register for this course. Overqualified students as determined by a placement test may be deregistered and directed to transfer to another course. Does not count toward graduation. A through C/Unsatisfactory grading only. The Pass/No Credit option may not be used.
3 credits

MAP 103 Proficiency Algebra
An intensive review of high school algebra as preparation for calculus and other mathematics. Facility with exponents, basic graphing, solving linear and quadratic equations in one variable, solving linear systems in two variables, polynomials, factorization of algebraic expressions, binomial theorem, and inequalities. Algebraic manipulations, analytic geometry of lines. Does not count toward graduation. A through C/Unsatisfactory grading only. The Pass/No Credit option may not be used.
Prerequisite: Level 2 on the mathematics placement examination or MAP 101
3 credits
MAR

Marine Sciences

MAR 101-E Long Island Sound: Science and Use
An introduction to one of the region’s most important coastal marine environments-LONG ISLAND SOUND. The course traces the origin and development of the Sound; presents an overview of the natural physical, biological, chemical, and geological processes that characterize it; explores its importance to society and assesses how society’s uses of the Sound have affected it; evaluates attempts to manage it; and looks at the future of the Sound.
3 credits

MAR 104-E Oceanography
An examination of the World Ocean and the processes that control its major features and the life that inhabits it. Suitable for non-science majors.
3 credits

MAR 291 Topics in Marine Sciences
[Offered Fall 2005 only]
Directed readings in marine sciences to enhance the transition of students from the Southampton College Marine Sciences program to Stony Brook. Topic for this semester will be Utilization of Limited Resources, including forage fish, nutrient limitation/addition, foraging strategies, and related topics.
Prerequisite: Permission of instructor
1-2 credits, S/U grading

MAR 301 Environmental Microbiology
Microbiological mediation of natural processes in marine, freshwater, soil, and groundwater habitats, as well as microbial potential for remediation of pollutants and public health issues. The course includes a survey of taxonomic and metabolic diversity, elementary cell biology, nutrition, environmental controls on physiology and adaptations, biogeochemical cycles, and modern methods of sampling and analysis. Not for credit in addition to BIO 357.
Prerequisites: BIO 202; CHE 131 or 141
3 credits

MAR 302 Marine Microbiology and Microbial Ecology
Introduction to the evolution, diversity, and importance of the microbial flora of the sea. Lectures highlight the physiological distinctions and ecological functions of each of the major microbial groups (viruses, bacteria, fungi, protozoans, algae). Particular emphasis is placed on the role of these microorganisms in many of the elemental (geochemical) cycles of the oceans. Aspects of the microbiota as agents of environmental pollution or detoxification are also discussed.
Prerequisites: BIO 201 and 202; CHE 132 or 142
Advisory Prerequisite: MAR 301
3 credits

MAR 303 Long Island Marine Habitats
The study of six representative marine environments around Long Island. Students visit the sites on weekly field trips, measuring environmental parameters and identifying common plants and animals. Using qualitative and quantitative methods in the field and in two-weekly laboratory sessions, the class determines major factors that control the biological community in each habitat.
Prerequisites: U3 or U4 standing; BIO 201
Advisory Prerequisites: AMS 110 or other statistics course; MAR 101 or 104 or 333
3 credits

MAR 304-E Waves, Tides, and Beaches
A survey of water waves and tides, including both a description of the phenomena and the basic theory of waves and sediment transport. This background forms the basis for a description of shore processes including beaches, shoreface dynamics, and coastal erosion. Areas of current research are also discussed.
Prerequisite: MAT 127 or 132 or 142 or AMS 161
Advisory Prerequisites: MAT 101 or 104 or 333; PHY 122/124 or 126 or 132/134 or 142
3 credits

MAR 305 Experimental Marine Biology
Students design and conduct experiments in the laboratory and at local field sites, collect and analyze data, and use scientific literature to interpret and present results in papers and oral presentations.
Prerequisites: U3 or U4 standing; BIO 201
Advisory Prerequisites: CHE 131 or 141; AMS 110 or other statistics course; MAR 101 or 104 or 333
3 credits

MAR 308 Principles of Instrumental Analysis
The development of familiarity in the laboratory with the techniques and instrumentation used in environmental analytical chemistry, emphasizing determination of trace inorganic species. Primary emphasis on applications utilizing the absorption of electromagnetic radiation. Topics include metal determinations in sediments and in river water using molecular ultraviolet-visible and atomic absorption spectrometry.
Prerequisites: CHE 132/134 or 142/144
3 credits

MAR 315-H Conservation Biology and Marine Biodiversity
The fundamental concepts of Conservation Biology, a new synthetic field that incorporates principles of ecology, biogeography, population genetics, systematics, evolutionary biology, environmental sciences, sociology, anthropology, and philosophy toward the conservation of biological diversity. Examples drawn from the marine environment emphasize how the application of conservation principles varies from terrestrial, aquatic, and marine realms.
Prerequisite: BIO 351 or 353
3 credits

MAR 318 Engineering Geology and Coastal Processes
Fundamental concepts of soil, sediment, and rock mechanics and the physics of surficial processes. Application is made to problems of geotechnical and coastal engineering. Topics include consolidation, loose boundary hydraulics, slope stability, underwater excavations and beach and tidal inlet stability, and channel sedimentation. This course is offered as both GEO 318 and MAR 318.
Prerequisites: GEO 102 or GEO 101 and 112; MAT 127 or 132 or 142 or 171 or AMS 161
3 credits

MAR 320 Limnology
The physical, chemical, and biological aspects of lakes and ponds. The morphology of lake basins, physics of water movement, water chemistry, and ecology of organisms are explored through lecture and laboratory instruction. The laboratory portion of the course includes field sampling to investigate temporal variation in water chemistry and plankton biology, and laboratory experiments to demonstrate important concepts.
Prerequisites: BIO 201; CHE 131 or 141
3 credits

MAR 333-H Coastal Oceanography
Aspects of physical, biological, chemical, and geologic processes that characterize coastal marine environments. Topics include such natural phenomena as upwelling, particle transport, benthic/pelagic coupling, and barrier island processes, as well as the impacts of society on the Coastal Ocean.
Prerequisites: MAT 125 or 131 or 141 or AMS 151; completion of D.E.C. category E
3 credits

MAR 334-E Remote Sensing of the Environment
A study of the theory of remote sensing and its application in the fields of atmospheric science and oceanography. A discussion of the interaction of electromagnetic radiation with rough surfaces and the atmosphere is followed by a treatment of sensors and platforms. The remainder of the course is devoted to data processing techniques involved in remote sensing.
Prerequisite: One of the following: ENS/PHY 119, PHY 127, PHY 132/134, or PHY 142
3 credits

MAR 336 Marine Pollution
A review of the sources, transport, and fate of toxic and non-toxic contaminants in the ocean. The interactions of biological, chemical, and physical processes that control the cycling and toxicity of contaminants are considered. Contaminants include metals, oil, halogenated hydrocarbons, radioactive wastes, excess nutrients, plastics, and solid wastes.
Prerequisites: BIO 201; CHE 131 or 141; MAR 333
3 credits

MAR 340-H Environmental Problems and Solutions
A detailed examination of the scientific, social, and legal aspects of important environmental problems, including global climate change, the depletion of atmospheric ozone, acid rain, rain forests and the loss of biodiversity, and energy conservation, as well as case histories of problems such as the use of DDT, environmental carcinogens, and lead poisoning.
Prerequisites: U3 or U4 standing; one course in chemistry or biology
3 credits

MAR 346 Marine Sedimentology
A study of sedimentology in the marine environment, including an introduction to fluid mechanics, sediment transport theory, quantitative models of sedimentation, and dynamic stratigraphy.
Prerequisites: GEO 102 or 122; PHY 126 or 132/134 or 142
3 credits

MAR 349 Introduction to Biological Oceanography
An examination of the processes producing and maintaining the abundances, composition, and temporal variations of organisms in the ocean. The role of biological processes in global cycles and the food chain, beginning with microbes and progressing through fisheries, are also covered. Weekly three-hour laboratory or field sessions present methods used in observational and experimental studies.
Prerequisites: CHE 131, CHE 132, and BIO 201
4 credits

MAR 350 Introduction to Ocean Physics
An introduction to hydrodynamics, contemporary ideas on ocean circulation, and the application of acoustics and optics to ocean technologies. Not for credit in addition to MAR 362.
Prerequisites: ENS/PHY 119 or PHY 121/123 or 125 or 131/133 or 141; MAT 127 or 132 or 142 or 171 or AMS 161
2 credits
MAR 351 Introduction to Ocean Chemistry
Chemical principles applied to the study of the oceans. How chemical tracers are used to determine the geo-
logical, physical, and biological characteristics of pre-
sent and past oceans. Other topics include physical 
marine chemistry, nutrient and carbon cycling, organic 
geochemistry, isotope geochemistry, sediment chem-
istry and diagenesis, air-sea exchange and controls on 
carbon dioxide, and estuarine geochemistry. 
Prerequisites: CHE 132; MAR 101 or 104 or 333 
3 credits

MAR 352 Introduction to Physical 
Oceanography
An introduction to the physical properties, motion of, and forces that drive the movement of fluids (air and 
water) on the earth. Physical oceanographic process-
es that range in scale from several mm to 1000s of km 
will be studied. This course will introduce the student to 
the physics of the marine environment and the tools 
(physical, mathematical, scientific) to study these 
waters. Environments ranging from pelagic to estuar-
ine will be examined. Not for credit in addition to MAR 
350. 
Prerequisites: MAT 126, 132, or 142; PHY 119, 121, 
123, 131 or 141 
2 credits

MAR 353 Physical Oceanography 
Laboratory
An introduction to the measurements, equipment, and 
data processing techniques used to study the motion 
of fluids (air and water) on the earth. Students will 
learn to use scientific instruments, design sampling 
strategies, and utilize previously collected data sets to 
study both local and global processes. At-sea collec-
tion and analysis of data will be emphasized. 
Pre- or co-requisite: MAR 350 or 352 
1 credit

MAR 366 Plankton Ecology
An introduction to the biology of the plant and animal 
plankton present in the sea. Techniques of collection, 
enumeration, and identification of phytoplankton and 
zooplankton are described. Life histories are studied 
and factors that influence seasonal changes in species 
and biomass are examined. 
Prerequisites: BIO 201 and 202 
3 credits

MAR 370 Marine Mammals
The biology of the major groups of marine mammals, 
including cetaceans, pinnipeds, and sirensians. Topics 
include evolutionary history and adaptation, ther-
moregulation, locomotion and foraging, diving physi-
ology and behavior, communication and sensory sys-
tems, social behavior, reproduction, energetics, distri-
bution patterns, exploitation and conservation. 
Prerequisites: BIO 201, BIO 203 
3 Credits

MAR 371 The Biology and Conservation 
of Marine Birds and Sea Turtles
A survey of the basic biology of marine birds and sea 
turtles, with an emphasis on species endemic to the 
Northeast U.S. Topics covered include origins, taxon-
omy, classification, and biology, with an emphasis on 
conservation status. Weekly lectures will be supplemented with three field 
trips, of which the student must attend at least two. 
Prerequisites: BIO 201, BIO 203 
3 Credits

MAR 375 Marine Mammal and Sea Turtle 
Rehabilitation
An intensive hands-on course designed to introduce 
students to the topics of marine mammal and sea tur-
tle biology as they relate to rehabilitation and research. Students will be exposed to marine mammal 
and sea turtle ecology, conservation issues, manage-
ment, and research in the context of wildlife rehabiliti-
tion. Through active participation in the rehabilita-
tion activities at the New York State’s only marine 
mammal rescue facility, instructive lectures, writing, 
reading assignments, quizzes, tests, and research, stu-
dents will be offered the opportunity to be thoroughly 
immersed in the field of marine mammal and sea tur-
tle rehabilitation. 
Prerequisite: BIO 201 or permission of instructor 
3 credits

MAR 380 Ichthyology
The biology of fishes. This course focuses on the 
diversity of fishes and the physiological, anatomical, 
ecological, and behavioral adaptations that allow them 
to populate a wide range of niches and environments. 
Field and laboratory work provide students with prac-
tical experience in collecting, identifying, and study-
ng fish. 
Prerequisites: BIO 201, BIO 328 or 344 or 346 
3 credits

MAR 388 Tropical Marine Ecology
This travel course surveys organisms (invertebrates, 
fishes and algae) and habitats (coral reefs, sea grass 
meadows and mangrove forests) within tropical 
marine coral reef ecosystems. The course consists of 
formal lectures, demonstrations and instructor-led 
field trips and involves snorkeling, SCUBA diving, 
reefwalking and underwater photography. Students 
will develop individual research projects requiring 
field observations and collecting data and will write a 
research proposal and final research papers. 
Prerequisites: BIO 201 and permission of instructor 
5 credits

MAR 385 Principles of Fishery Biology and 
Management
The theory, techniques, history, and practical prob-
lems of fishery management, with emphasis on Long 
Island fisheries. Three field trips outside regularly 
scheduled class meetings are required. 
Prerequisites: BIO 201; MAT 125 or 131 or 141 or 
AMS 151 
3 credits

MAR 392-H Waste Management Issues
Conventional and innovative approaches to waste 
reduction, recycling, and reuse. The environmental 
impacts of waste on the terrestrial and marine envi-
ronment are introduced as are the complex social, 
political, and scientific issues of making sound policy 
decisions. 
Prerequisites: GEO 101; CHE 131 or ENS/PHY 119 
3 credits

MAR 394-H Environmental Toxicology and 
Public Health
Principles of toxicology are presented and problems 
associated with major classes of toxic chemicals to 
human and environmental health are examined. Case 
studies dealing with current waste management issues are also discussed. This course is offered as both BCP 394 and MAR 394. 
Prerequisites: BIO 201; CHE 131 or 141 
Advisory Prerequisite: CHE 321 
3 credits

MAR 395 Topics in Marine Environmental 
Sciences
Semester supplements to this Bulletin contain specific 
description when course is offered. May be repeated 
for credit as the topic changes. 
Prerequisite: One upper-division MAR course 
3 credits

MAR 475 Undergraduate Teaching 
Practicum
A practicum in the techniques of teaching marine sci-
ences courses. Each student assists a faculty member 
in a regularly scheduled class. The student may be 
required to attend all classes and meets with the fac-
ulty member at regularly scheduled times. Students 
may assist in laboratories, hold recitation or review 
sessions, propose questions for examinations, and 
review already graded assignments. 
Prerequisites: U3 or U4 standing; permission of 
instructor and MSRC Undergraduate Programs 
Director 
3 credits, S/U grading

MAR 487 Research in Marine Sciences
A student may conduct research for credit. May be 
repeated. 
Prerequisite: Permission of instructor and MSRC 
Undergraduate Programs Director 
0-6 credits

MAR 488 Internship
Participation in research at off-campus laboratories or 
in the activities of public and private agencies and 
organizations. May be repeated up to a limit of 12 
credits. 
Prerequisites: MAR 333; permission of instructor and 
MSRC Programs Director 
0-6 credits, S/U grading

www.stonybrook.edu/ugbulletin 459
MAT 118-C Mathematical Thinking
Development of quantitative thinking and problem solving through a selection of mathematical topics: logic and reasoning; numbers, functions, and modeling; combinatorics and probability; growth and change. Other topics may include geometry, statistics, game theory, and graph theory. Through their engagement in problem solving, students develop an appreciation of the intellectual scope of mathematics and its connections with other disciplines. Prerequisite: MAP 103 or level 2+ or higher on the mathematics placement examination
Prerequisite must be met within one year of beginning this course.
3 credits

MAT 122-C Overview of Calculus with Applications
The basics of calculus in a self-contained, one-semester course. Properties and applications of polynomial, exponential, and logarithmic functions. Derivatives: slopes, rates of change, optimization, integrals, area, cumulative change, and average. The fundamental theorem of calculus. Emphasis on modeling examples from economics. Students who subsequently wish to enroll in MAT 125 or 131 will be required to take MAT 130 as a pre- or corequisite to either course or to score level 4 on the mathematics placement examination before taking either course. Prerequisite: MAP 103 or level 3 on the mathematics placement examination
Prerequisite must be met within one year prior to beginning the course.
3 credits

MAT 123-C Introduction to Calculus
Comprehensive preparation for the regular calculus sequences, with introduction to derivatives. Careful development of rational, exponential, logarithmic, and trigonometric functions, and their applications. Asymptotics and limits. Linear approximations, slope and derivatives, detailed curve sketching. General modeling examples. Prerequisite: MAP 103 or level 3 on the mathematics placement examination
Prerequisite must be met within one year prior to beginning the course.
3 credits

MAT 125-C Calculus A
Differential calculus, emphasizing conceptual understanding, computations and applications, for students who have the necessary background from 12th-year high school mathematics. Differentiation of elementary algebraic, trigonometric, exponential, and logarithmic functions; graphing; modeling; and maximization. May not be taken for credit in addition to MAT 131 or 141 or AMS 151. Prerequisites: C or higher in MAT 122; or level 4 on the mathematics placement examination; or MAT 122 and coregistration in MAT 130
3 credits

MAT 126-C Calculus B
A continuation of MAT 125, covering integral calculus: the fundamental theorem, symbolic and numeric methods of integration, area under a curve, volume, applications such as work and probability. May not be taken for credit in addition to MAT 142 or 171 or AMS 161. Prerequisite: C or higher in MAT 125 or 131 or 141 or AMS 151 or level 6 on the mathematics placement examination
3 credits

MAT 127-C Calculus C
A continuation of MAT 126, covering: improper integrals and the Hospital's rule, complex numbers, sequences, series, Taylor series, differential equations, and modeling. May not be taken for credit in addition to MAT 132 or 142 or 171 AMS 161. Prerequisite: C or higher in MAT 126 or level 8 on the mathematics placement examination
3 credits

MAT 130 Functions
Inverse functions, exponential and logarithmic functions, rational measure of angles and trigonometric functions. Open to prospective students in engineering, physical sciences, and mathematics who need to bridge the gap between MAT 122 and 125 or MAT 131 or AMS 151. May not be taken for credit in addition to MAT 123. Advisory Prerequisite: C or higher in MAT 122
Advisory Corequisite: MAT 125 or 131 or AMS 151
1 credit

MAT 131-C Calculus I
The differential calculus and integral calculus, emphaizing conceptual understanding, computations, and applications, for students who have the necessary background from 12th-year high school mathematics. Differentiation of elementary algebraic; trigonometric, exponential, and logarithmic functions; graphing; modeling; and maximization; the Riemann integral; and the fundamental theorem. May not be taken for credit in addition to MAT 125 or 141 or AMS 151. Prerequisite: B or higher in MAT 125, or level 5 on the mathematics placement examination; or, B higher in MAT 122 and coregistration in MAT 130
3 credits

MAT 132-C Calculus II
A continuation of MAT 131, covering symbolic and numeric methods of integration; area under a curve; volume; applications such as work and probability; improper integrals and the Hospital's rule; complex numbers; sequences; series; Taylor series; differential equations; and modeling. May not be taken for credit in addition to MAT 125 or 142 or 171 or AMS 161. Prerequisite: C or higher in AMS 151 or MAT 126 or MAT 131 or 141, or level 7 on the mathematics placement examination
4 credits

MAT 141-C Honors Calculus I
The topics of MAT 131 treated with additional attention to the underlying theory as a means of understanding why the processes of calculus work. May not be taken for credit in addition to MAT 125 or 131. Prerequisites: C or higher in MAT 122 or MAT 125 or 131 or 141 or AMS 151
4 credits

MAT 142 Honors Calculus II
A continuation of MAT 141 in the same spirit, covering the topics of MAT 132. May not be taken for credit in addition to MAT 126 or 127 or 132 or 171 or AMS 161. Prerequisite: C or higher in MAT 141, or B or higher in MAT 131 or AMS 151, or level 7 on the mathematics placement examination
4 credits

MAT 160 Mathematical Problems and Games
Intended for students interested in sharpening their problem-solving skills and in developing their ability to express mathematical ideas. 1 credit, SU grading

MAT 171-C Accelerated Single-Variable Calculus
A single semester, honors-level course which reviews the material in MAT 131 in a few weeks, then concentrates on the topics covered in MAT 132 with additional attention paid to the underlying theory. Primarily intended for students who have had calculus in high school. May not be taken for credit in addition to MAT 125 or 127 or 132 or 142 or AMS 161. Prerequisites: Level 5 on the AB Calculus AP exam, Level 3 on the BC Calculus exam, A or A- in MAT 131 or AMS 151, MAT 141, or level 7 on the mathematics placement exam. Priority given to students in the University’s honors programs.
4 credits

MAT 200 Logic, Language and Proof
A basic course in the logic of mathematics, the construction of proofs, and the writing of proofs. The mathematical content is primarily set theory, combinatorics, and Euclidean geometry. There is considerable focus on writing. Prerequisites: C or higher in MAT 203 or 205 or AMS 261 and in MAT 211 or AMS 210; or A or higher in MAT 125 or 131 or AMS 151; or B- or higher average in MAT 125/126/127 or MAT 151/152 or MAT 141/142 or AMS 151/161 or MAT 171; or permission of instructor
3 credits

MAT 203 Calculus III with Applications
Vector algebra in two and three dimensions, multivariate differential and integral calculus, optimization, vector calculus including the theorems of Green, Gauss, and Stokes. Applications to economics, engineering, and all sciences, with emphasis on numerical and graphical solutions; use of graphing calculators or computers. May not be taken for credit in addition to AMS 261 or MAT 205. Prerequisite: C or higher in MAT 127 or 132 or 142 or 171 or AMS 161 or level 9 on the mathematics placement examination
4 credits

MAT 205 Calculus III
Vector algebra, multivariate differential and integral calculus, divergence and curl, line and surface integrals, theorems of Green, Gauss, and Stokes. Applications to economics, engineering, and all sciences, more theoretical than MAT 203 with applications to the physical sciences. Not for credit in addition to AMS 261 or MAT 205. Prerequisite: C or higher in MAT 127 or 132 or 142 or 171 or AMS 161 or level 9 on the mathematics placement examination
Prereq-or Corequisite: MAT 211 or AMS 210
3 credits

MAT 211 Introduction to Linear Algebra
Introduction to the theory of linear algebra with some applications; vectors, vector spaces, bases and dimension, applications to geometry, linear transformations and rank, eigenvalues and eigenvectors, determinants and inner products. May not be taken for credit in addition to AMS 210. Prerequisite: C or higher in AMS 151 or MAT 131 or 141 or coregistration in MAT 126 or level 7 on the mathematics placement examination
3 credits

MAT 260 Problem Solving in Mathematics
Students actively solve challenging problems in plane geometry, basic number theory, and calculus, and write precise arguments. Relevant preparation for problem-solving is provided in the course. Prerequisite: MAT 203 or 205 or AMS 261, or B or higher in MAT 127 or 132 or 142 or AMS 151
1 credit
MAT 303 Calculus IV with Applications
Homogeneous and inhomogeneous linear differential equations; systems of linear differential equations; series solutions; Laplace transforms; introduction to wave, heat, and Laplace equations; Fourier series. Applications to economics, engineering, and all sciences with emphasis on numerical and graphical solutions; use of computers. May not be taken for credit in addition to AMS 361 or MAT 305.
Prerequisite: C or higher in MAT 127 or 132 or 142 or 171 or AMS 161 or level 9 on the mathematics placement examination. 3 credits

MAT 305 Calculus IV
Linear versus nonlinear equations and their numerical solutions, existence and uniqueness, Duhamel's principle for linear equations, series solutions, systems. Introduction to wave, heat, and Laplace equations; Fourier series; comparison of separation of variables with integral formulas. More theoretical than MAT 303. Applications to the physical sciences. May not be taken for credit in addition to MAT 303 or AMS 261.
Prerequisite: C or higher in MAT 127 or 132 or 142 or 171 or AMS 161 or level 9 on the mathematics placement examination. 3 credits

MAT 310 Linear Algebra
Finite dimensional vector spaces, linear maps, dual spaces, bilinear functions, inner products. Additional topics such as canonical forms, multilinear algebra, numerical linear algebra.
Prerequisites: C or higher in MAT 211 or 305 or AMS 210, C or higher in MAT 200 or permission of instructor. 3 credits

MAT 311 Number Theory
Congruences, quadratic residues, quadratic forms, continued fractions, Diophantine equations, number-theoretical functions, and properties of prime numbers.
Prerequisites: C or higher in MAT 312 or 313 or 318; C or higher in MAT 200 or permission of instructor. 3 credits

MAT 312 Applied Algebra
Topics in algebra: groups, informal set theory, relations, homomorphisms. Applications: error correcting codes, Burnside's theorem, computational complexity, Chinese remainder theorem. This course is offered as both AMS 351 and MAT 312.
Prerequisite: C or higher in AMS 210 or MAT 211
Advisory Prerequisite: MAT 200 or CSE 113 3 credits

MAT 313 Abstract Algebra
Groups and rings together with their homomorphisms and quotient structures. Unique factorization, polynomials, and fields.
Prerequisites: C or higher in MAT 310 or 312 or 318; C or higher in MAT 200 or permission of instructor. 3 credits

MAT 316 Invitation to Modern Mathematics
Mathematical reasoning and the process of mathematical research. The power and range of modern mathematics are discussed in detail through a few key theorems in algebra, analysis, geometry, and topology together with some applications.
Prerequisites: MAT 211 or AMS 210; MAT 203 or 205 or AMS 261; MAT 200 or permission of instructor. 3 credits

MAT 318 Classical Algebra
Re-examines algebra from an historical perspective: the Hindu-Arabic number system; mathematics in ancient Egypt and China; the Greek contributions (unique factorization, Euclidean division algorithm, polynomials); unsolvability of the three great problems (trisecting the angle, squaring the circle, solving quintics); modern perspectives.
Prerequisites: C or higher in the following: MAT 125 or 131 or 141 or AMS 151; MAT 211 or AMS 201; MAT 200 or permission of instructor. 3 credits
Advisory Prerequisite: MAT 125 or 131 3 credits

MAT 319 Foundations of Analysis
A careful study of the theory underlying topics in one-variable calculus, with an emphasis on those topics arising in high school calculus. The real number system. Limits of functions and sequences. Differentiations, integration, and the fundamental theorem. Infinite series.
Prerequisites: C or higher in MAT 200 or permission of instructor; C or higher in one of the following: MAT 205, 206, 211, AMS 261, or A or higher in MAT 127, 132, 142, 171, or AMS 161 5 credits

MAT 320 Introduction to Analysis
Prerequisites: C or higher in MAT 200 or permission of instructor; C or higher in one of the following: MAT 205, 206, 211, AMS 261, or A or higher in MAT 127, 132, 142, 171, or AMS 161 5 credits

MAT 322 Analysis in Several Dimensions
Continuity, differentiation, and integration in Euclidean n-space. Differentiable maps. Implicit and inverse function theorems. Differential forms and the general Stokes’s theorem.
Prerequisites: C or higher in MAT 203, 205, or AMS 261; C or higher in MAT 211 or AMS 210; B or higher in MAT 320
Advisory Pre- or Corequisite: MAT 310 3 credits

MAT 324 Real Analysis
Prerequisites: C or higher in MAT 203 or 205 or AMS 261; B or higher in MAT 320 3 credits

MAT 331 Computer-Assisted Mathematical Problem Solving
Exploration of the use of the computer as a tool to gain insight into complex mathematical problems through a project-oriented approach. Students learn both the relevant mathematical concepts and ways that the computer can be used (and sometimes misused) to understand them. The particular problems may vary by semester; past topics have included cryptography, fractals and recursion, modeling the flight of a glider, curve fitting, the Brachistochrone, and computer graphics. No previous experience with computers is required.
Prerequisite: C or higher in MAT 203 or 205 or AMS 261 3 credits

MAT 336-H History of Mathematics
A survey of the history of mathematics from the beginnings through the 19th century, with special attention to primary sources and to the interactions between culture and mathematics. Emphasis on topics germane to the high school curriculum. Mesopotamian, Egyptian, and Greek mathematics; non-European mathematics; early Renaissance mathematics; the birth and flowering of calculus; the beginnings of probability theory; and the origin of non-Euclidean geometries and the modern concept of number.
Prerequisite: MAT 200 or AMS 301 3 credits

MAT 341 Applied Real Analysis
Partial differential equations of mathematical physics: the heat, wave, and Laplace equations. Solutions by techniques such as separation of variables using orthogonal functions (e.g., Fourier series, Bessel functions, Legendre polynomials). D’Alembert solution of the wave equation.
Prerequisites: C or higher in the following: MAT 203 or 205 or AMS 261; MAT 303 or 305 or AMS 361
Advisory Prerequisite: MAT 200 3 credits

MAT 342 Applied Complex Analysis
Functions of a complex variable, calculus of residues including evaluation of real integrals, power and Laurent series, conformal mappings and applications, Laplace and Cauchy-Riemann equations, the Dirichlet and Neumann problems, and the Laplace and Hilbert transforms and their applications to ordinary and partial differential equations.
Prerequisites: C or higher in the following: MAT 203 or 205 or AMS 261; MAT 303 or 305 or AMS 361
Advisory Prerequisite: MAT 200 3 credits

MAT 351 Differential Equations: Dynamics and Chaos
A study of the long-term behavior of solutions to ordinary differential equations or of iterated mappings, emphasizing the distinction between stability on the one hand and sensitive dependence and chaotic behavior on the other. The course describes examples of chaotic behavior and of fractal attractors, and develops some mathematical tools for understanding them.
Prerequisites: C or higher in the following: MAT 203 or 205 or AMS 261; MAT 303 or 305 or AMS 361; MAT 200 or permission of instructor 3 credits

MAT 356 Geometric Structures
Formal geometries and models. Topics selected from projective, affine, Euclidean, and non-Euclidean geometries.
Pre- or Corequisites: C or higher in the following: MAT 203 or 205 or AMS 261; MAT 211 or AMS 210; MAT 200 or permission of instructor 3 credits

MAT 362 Differential Geometry of Surfaces
The local and global geometry of surfaces: geodesics, parallel transport, curvature, isometries, the Gauss map, the Gauss-Bonnet theorem.
Prerequisite: C or higher in MAT 319 or 320 or 364 3 credits

MAT 364 Topology and Geometry
A broadly based introduction to topology and geometry, the mathematical theories of shape, form, and rigid structure. Topics include intuitive knot theory, lattices and tilings, non-Euclidean geometry, smooth curves and surfaces in Euclidean 3-space, open sets and continuity, combinatorial and algebraic invariants of spaces, higher dimensional spaces.
Prerequisites: MAT 203 or 205 or AMS 261
Advisory Prerequisite: MAT 319 or 320 3 credits
MAT 371 Logic
A survey of the logical foundations of mathematics: development of propositional calculus and quantification theory, the notions of a proof and of a model, the completeness theorem, Gödel’s incompleteness theorem. This course is offered as both CSE 371 and MAT 371.
Pre- or Corequisite: MAT 200 or CSE 213
3 credits

MAT 373 Analysis of Algorithms
Mathematical analysis of a variety of computer algorithms including searching, sorting, matrix multiplication, fast Fourier transform, and graph algorithms. Time and space complexity. Upper-bound, lower-bound, and average-case analysis. Introduction to NP completeness. Some machine computation is required for the implementation and comparison of algorithms. This course is offered as both CSE 373 and MAT 373.
Prerequisites: MAT 211 or AMS 210; CSE 214
3 credits

MAT 401 Seminar in Mathematics
Discussions of a specific area of interest in mathematics. The work of each semester covers a different area of mathematics. May be repeated as topic changes. Prerequisites will be announced with the topic each time the course is offered.
Prerequisites: U3 or U4 standing; additional prerequisites announced with topic
3 credits

MAT 402 Seminar in Mathematics
Discussions of a specific area of interest in mathematics. The work of each semester covers a different area of mathematics. May be repeated as topic changes. Prerequisites will be announced with the topic each time the course is offered.
Prerequisites: U3 or U4 standing; additional prerequisites announced with topic
3 credits

MAT 475 Undergraduate Teaching Practicum
Each student assists in teaching a lower-division mathematics course or works in the Mathematics Learning Center. The student’s work is regularly supervised by a faculty member. In addition, a weekly seminar is conducted. Responsibilities may include preparation of materials for student use and discussions, helping students with problems, and involvement in “alternative” teaching projects. Intended for upper-division students who have excelled in the calculus sequence. May not be used for major credit.
Prerequisite: Permission of the director of undergraduate studies
3 credits, S/U grading

MAT 487 Independent Study in Special Topics
A reading course for juniors and seniors. The topics may be chosen by the student with the approval of a supervising member of the faculty, who also takes responsibility for evaluation. A topic that is covered in a course regularly offered by the department is not appropriate for independent study. May be repeated.
Prerequisite: Permission of the director of undergraduate studies
0-6 credits

MAT 495 Honors Thesis
The student and a supervising faculty member together choose a topic in mathematics, and the student writes a substantial paper expounding the topic in a new way.
Prerequisite: Permission of the director of undergraduate studies
3 credits
MEC 111 Computer Science for Engineers
An introduction to computer science and the use of the computer for solving scientific and engineering-related problems. Students gain experience using the FORTRAN programming language. Primarily for engineering students not planning to take advanced computer science courses. Courses may not be taken simultaneously with CSE 110. Students who have a C or higher in CSE 114 may not take MEC 111.
Pre- or Corequisites: AMS 151 or MAT 125 or 131 or 141; PHY 125 or 131/133 or 141
3 credits

MEC 112 Practical C/C++ for Scientists and Engineers
Introduces computer sciences and the use of the computer for solving scientific and engineering problems using the C/C++ programming language. Students gain experience using graphical interface (GUI) and object-oriented programming concepts. Primarily for engineering students who are not planning to take advanced computer science courses. Students who have earned a C or higher in CSE 114 may not take MEC 112.
Prerequisites: AMS 151 or MAT 125, 131 or 141; PHY 125, 131/133 or 141
3 credits

MEC 160-E Introductory Nuclear Science and Technology
Introduces the basic concepts of nuclear science. Topics include: basic atomic structure; isotopes; mass-energy equivalence; binding energy; decay of radionuclides; nuclear reactions; fission and fusion; the interaction of radiation with matter; and biological effects of radiation. Discusses nuclear science concepts in the context of relevant applications such as nuclear medicine and imaging, nuclear power, radioactive waste, food irradiation, and weapons. Not intended for science majors.
Prerequisite: MAT 125 or level 4 on the mathematics placement examination
3 credits

MEC 200 Technical Communication in Mechanical Engineering I
Introduction to technical writing and oral communication topics chosen from mechanical engineering. Includes technical memo and report writing and an introduction to researching sources of information as well as engineering ethics. Emphasizes the development of oral presentation skills.
Prerequisites: MEC major; U2 standing
1 credit, SI/U grading

MEC 202 Engineering Drawing and CAD I
Introduces methods used to communicate design ideas through the techniques of hand-drawn technical sketching and computer-aided design software. Includes the principles of engineering drawing and sketching for mechanical design and the application of computer-aided design software in developing engineering drawings and mechanical designs.
Prerequisite: MEC major or permission of department
1 credit

MEC 203 Engineering Drawing and CAD II
Application of computer graphics and solid modeling to design and representation of 3D objects, their assembly and tolerance analysis. Includes hands-on experience in the use of CAD software packages for solid modeling.
Prerequisite: MEC 202
2 credits

MEC 260 Engineering Statics
Prerequisites: PHY 131/133 or 141 or 125
corequisite: AMS 261 or MAT 203
2 credits

MEC 262 Engineering Dynamics
Prerequisite: MEC 260
3 credits

MEC 280-H Pollution and Human Health
An examination of major environmental pollution problems such as electromagnetic radiation, ozone layer depletion, and global warming, with a specific focus on the resulting effects on human health. Assessment of health risks in relation to the formulation of environmental and workplace regulations is also considered.
Prerequisite: One D.E.C. category E course
3 credits

MEC 290-H Nuclear Technology: History, Society, Medicine, and the Environment
Introduces the history and applications of nuclear technology in our society and addresses the social and environmental implications and issues. Topics include radiation types and sources; biological effects, standards, and radiation protection; fission, breeding, and fusion; nuclear waste; weapons. Discusses current applications including power, food irradiation, medical applications, isotope dating, and advanced applications such as space power and propulsion, accelerators, and antiprotons.
Prerequisite: One D.E.C. category E course
3 credits

MEC 300 Technical Communication in Mechanical Engineering II
Aims to ensure proficiency in the type of communication necessary for success in the engineering profession. Provides students with the ability to apply their knowledge of correct written and spoken English to the diverse modes of communication encountered and used by engineers in the professional workplace.
Prerequisites: WRT 102; MEC major; U3 or U4; MEC 200
1 credit, SI/U grading

MEC 301 Thermodynamics
Variables that describe the thermodynamic state of a system or control volume, including absolute temperature, internal energy, enthalpy, and entropy are introduced, and basic principles governing the transformations of energy, especially heat and work, are developed. Underlying principles are used to analyze and solve problems related to thermodynamic systems and to determine the changes in properties of the systems and surroundings implied by changes in inputs, configuration, or constraints.
Prerequisites: AMS 261 or MAT 203; PHY 125 or 131/133 or 141
3 credits

www.stonybrook.edu/ugbulletin
MEC 305 Heat and Mass Transfer
The fundamental laws of momentum, heat and mass transfer, and the corresponding transport coefficients. Principles of steady-state and transient heat conduction in solids are investigated. Laminar and turbulent boundary layer flows are treated, as well as condensation and boiling phenomena, thermal radiation, and radiation heat transfer between surfaces. Applications to heat transfer equipment are covered throughout the course.
Prerequisites: MEC 301 and 364; MEC 102 or 111 or 112, or ESG 111, or ESE 124, or CSE 114 or 130
3 credits

MEC 309 Numerical Methods for Engineering Analysis
Solving nonlinear equations, systems of linear equations, interpolation/extrapolation, curve fitting integration, and differential equations. Special emphasis on the implementation of numerical methods in FORTRAN computer programs to solve computation problems that arise in the engineering design process.
Prerequisites: MEC 102 or 111 or 112 or ESG 111; AMS 261 or MAT 203; AMS 361 or MAT 303
3 credits

MEC 310 Introduction to Machine Design
Application of graphical and analytical methods to the analysis and synthesis of mechanisms. Covers concepts of degrees of freedom, graphical and analytical linkage synthesis, position, velocity, acceleration, and force analysis of linkage mechanisms. Introduces principles behind the operation of various machine elements such as gears and gear trains, cams, flywheels, roller and journal bearings, couplings, clutches, brakes, belts, and chains and their design, and analyses techniques.
Prerequisites: MEC 102 or 111 or 112 or CSE 114 or 130 or ESG 111; AMS 261 or MAT 203; AMS 361 or MAT 303
3 credits

MEC 316 Mechanical Engineering Lab I: Sensors and Instrumentation
The spatial and temporal resolution of modern instrumentation and sensors that are particular to mechanical engineering. Concepts of static and dynamic response as well as probability, statistics, and the statistical analysis of data are discussed. Includes basic circuit components. Laboratory safety. Students learn to operate instruments for measuring temperature, pressure, flow velocity, displacement, angle, acceleration, and strain. Design project. Laboratory fee required.
Prerequisites: AMS 363 or MAT 303; MEC 363
Corequisites: MEC 301 and 364
4 credits

MEC 317 Mechanical Engineering Laboratory II
Hands-on experience in solid and fluid mechanics and heat transfer. Emphasis is on the understanding of fundamental principles as well as familiarity with modern experimentation. Lectures at the beginning of the course provide background information and theories of experimentation. Student groups perform four experiments each in solid mechanics and in fluid mechanics and heat transfer. Report writing is an integral part of the course, with emphasis on design of experiment, interpretation and presentation of data, error analysis, and conclusions. Laboratory fee required.
Prerequisites: MEC 316 and 364
Corequisite: MEC 305
3 credits

MEC 320 Engineering Design Methodology and Optimization
The general process of engineering design as a systematic and disciplined process. Covers material related to the formulation of design specifications and criteria; conceptual design and evaluation of the design options; design creativity; formulation of analyzable models; simulation and optimization techniques; design for manufacture; design for reliability, engineering economics, and engineering ethics.
Prerequisites: MEC 102 or 111 or CSE 114 or 130 or ESG 111
Corequisite: MEC 310
3 credits

MEC 323 Internal Combustion Engines
Introduces different types of internal combustion engines and their operations. Topics include the innovative concept of gas generator-expander engine; thermodynamics fundamentals; fuel-air cycle analysis; engine combustion and emission processes; engine operating characteristics. Includes both the relevant fundamental concepts and the extensive practical knowledge base on which engine research, development, and design depend.
Prerequisite: MEC 305
3 credits

MEC 326 Manufacturing Processes and Machining
Prerequisite: ESG 332
4 credits

MEC 350 Energy Conversion and Alternate Energy Technologies
Energy conversion principles, principal energy sources, and energy storage systems. Production technologies of useful energy and useful work with emphasis on technologies based on energy sources other than fossil or nuclear fuels, including direct energy conversion technologies (fuel cells, batteries, hybrid electric vehicles, and MHD generators), solar energy (solar thermal energy and photovoltaics), and wind energy.
Prerequisite: MEC 301
3 credits

MEC 363 Mechanics of Solids
Stress and deformation of engineering structures and the influence of the mechanical behavior of materials. Concepts of stress and strain, constitutive relations, analysis of statically indeterminate systems, study of simple bars and beams, and stability conditions. Emphasis on force equilibrium, elastic response of materials, geometric compatibility, Mohr’s circle, stresses and deflections in beams, and torsion and buckling of rods. Design for bending, shear, and combined states of stress.
Prerequisite: MEC 260
3 credits

MEC 364 Introduction to Fluid Mechanics
Fundamental properties of fluids and their conservation laws with applications to the design and evaluation of flows of engineering interest. Topics include hydrostatics, surface tension, dimensional analysis and dynamic similitude, Euler’s equation, rotating coordinate systems, boundary layers, lubrication, drag on immersed bodies, open channel and pipe flows, and turbomachinery.
Prerequisite: MEC 262
Pre- or Corequisite: MEC 301
3 credits

MEC 368 Energy Management in Commercial Buildings
Basic heating, ventilating, and air-conditioning (HVAC) system design and selection for commercial buildings. Includes both low-rise and high-rise structures. Selection of central plant components and equipment, calculation of space heating and cooling load, computer techniques estimating annual energy consumption. ASHRAE codes. Building controls.
Prerequisite: MEC 398
3 credits

MEC 391, 392 Introduction to Automotive Engineering I, II
This year-long course is a review of Society of Automotive Engineers (SAE) Collegiate Design competitions of past years and the rules of specific competitions and other competition-related issues. Selected engineering topics and mathematical/software tools are introduced including their application to solving engineering problems and to achieving design objectives. Students who enroll in MEC 391 must complete MEC 392 in the subsequent semester and receive only one grade upon completion.
Prerequisites to MEC 391: MEC 262 and 363
Prerequisite to MEC 392: MEC 391
1 credit, MEC 391
2 credits, MEC 392

MEC 393 Engineering Fluid Mechanics
The application of the principles of fluid mechanics to important areas of engineering practice such as turbomachinery, hydraulics, and wave propagation. Prepares students for advanced coursework in fluid dynamics. Extends the study of viscous effects, compressibility, and inertia begun in MEC 364.
Prerequisite: MEC 364
3 credits

MEC 398 Thermodynamics II
Prerequisites: MEC 301 and 364
3 credits

MEC 402 Mechanical Vibrations
Modeling, analysis, and design for mechanical vibrations. Fundamentals of free vibration, harmonically excited vibration, and vibration under general forcing conditions are considered for one degree, two degree, and multidegree of freedom systems; continuous systems; vibration design strategies including isolation and absorbers.
Prerequisites: MEC 262 and 363
3 credits

MEC 406 Energy Management in Commercial Buildings
Basic heating, ventilating, and air-conditioning (HVAC) system design and selection for commercial buildings. Includes both low-rise and high-rise structures. Selection of central plant components and equipment, calculation of space heating and cooling load, computer techniques estimating annual energy consumption. ASHRAE codes. Building controls.
Prerequisite: MEC 398
3 credits
MEC 410 Design of Machine Elements
Application of analytical methods, material science, and mechanics to problems in design and analysis of mechanical components. Includes the design of mechanical components such as bearings, gears, shafting, springs, fasteners, belts, clutches, and brakes, and takes into consideration factors such as manufacturability and reliability. Design projects with open-ended and interactive problems are assigned to integrate several machine elements in a system.
Prerequisites: MEC 310 and 363
3 credits

MEC 411 Control System Analysis and Design
Analysis and design of feedback control systems. Topics include system modeling; transfer function; block diagram; state space; root locus method; Bode diagram; PID and lead-lag compensator design.
Prerequisites: MEC 262; AMS 361 or MAT 303
3 credits

MEC 412 Computer-Aided Design
Application of the computer to solution methods and design in engineering. Discusses computer graphics, geometric modeling, and finite element analysis in structural mechanics, fluid mechanics, and heat transfer. Applications include stress analysis. Applied fluid mechanics and heat transfer. Includes hands-on experience in the use of CAD software packages for solid modeling, system modeling, and finite element analysis. Integrated CAD in which the analysis of fluid flow, heat transfer, and solid mechanics are combined to solve a design problem.
Prerequisites: MEC 310 and 363
3 credits

MEC 420 Turbomachinery and Applications
Classification of turbomachines, rotating flows, aerodynamics design of turbomachines, energy transfer between fluid and rotor, axial and radial devices, compressible gas flow, three-dimensional effects, rotating stall and surge theory. Numerous applications and design issues. Sample devices include propellers, fans, blowers, windmills, Pelton wheels, turbines, compressors, lawn sprinklers, etc.
Prerequisites: MEC 364
3 credits

MEC 421 Statistical Quality Control and Design of Experiments
Online techniques that determine and control the quality of mass-manufactured products on a real-time basis by means of statistical analysis. Offline use and applications of the design-of-experiment and Taguchi methods to optimize a product and a process design. The concept of total quality management. Histograms, tests for normality, variables, and attribute control charts, orthogonal arrays, and signal-to-noise arrays. Z-transform for the evaluation of the percentage of nonconforming parts, tests for special causes. Zbar-K charts, and process capability analysis. Acceptance quality level and lobby-lot inspection. This course offered as both AMS 421 and MEC 421.
Prerequisites: MEC 317
3 credits

MEC 422 Thermal System Design
Device design and system design. Quantitative data for system design including operating characteristics of compressors, turbines, heat exchangers, piping systems, internal combustion engines, and other components. Component matching and system simulation. Optimization including thermoeconomic evaluation and energy analysis. Case studies: refrigeration and air conditioning systems, combined cycles, steam-injected gas turbines.
Prerequisites: MEC 305
3 credits

MEC 440 Mechanical Engineering Design I
Part I of the two-semester capstone design project sequence. Senior students select a project, develop the necessary technical background, and write a proposal, progress reports, and a preliminary design report. Includes an oral presentation on the development and progress of the project. Not counted as a technical elective. Laboratory fee required. The final grade will be assigned at the end of the two course sequence MEC 440-441.
Prerequisites: MEC 300, 310, 317, 320, and 326; MEC major; U4 standing
Corequisites: MEC 410 and 411
3 credits

MEC 441 Mechanical Engineering Design II
Part II of the two-semester capstone design project sequence. Students complete the project design, build and test a prototype, write a midterm report and give an oral presentation. Not counted as a technical elective. Laboratory fee required.
Prerequisite: MEC 440
3 credits

MEC 442 Introduction to Experimental Stress Analysis
The concepts of three-dimensional stress and strain, their transformation laws, and their mutual relationships are discussed in detail. Results from theory of elasticity as pertinent to experimental stress analysis are also presented. Experimental techniques studied include two-dimensional photoelasticity, resistance strain gauge, moire method, brittle coating, and analog methods. The application of different techniques to the measurement of stress and strain in models as well as actual structures is demonstrated. Students form small groups and each group is assigned different laboratory projects to gain experience in various experimental stress analysis methods. Previously offered as MEC 342.
Prerequisites: MEC 363
3 credits

MEC 455 Applied Stress Analysis
A study of linear elastic solids with emphasis on internal stress analysis. Simple boundary value problems at plane structures are analyzed with various solution techniques. Major topics are stress and strain tensors, linear elasticity, principle of virtual work, force, field, stress functions, stress concentration, elementary fracture, and plasticity.
Prerequisite: MEC 363
3 credits

MEC 450 Mechatronics
An introduction to the design, modeling, analysis, and control of mechatronic systems (smart systems comprising mechanical, electrical, and software components). Fundamentals of the basic components needed for the design and control of mechatronic systems, including sensors, actuators, data acquisition systems, microprocessors, programmable logic controllers, and I/O systems, are covered. Hands-on experience in designing and building practical mechatronic systems is provided through integrated lab activities.
Prerequisites: MEC 310 and 316
3 credits

MEC 460 Introduction to Robotics: Theory and Applications
Robot components and mechatronic aspects of robotics (sensors, actuators, end effectors, system integration). Rotation, translation, rigid-body transform. Robotics foundations in kinematics and inverse kinematics, dynamics, serial and parallel manipulators and their duality. Introduction to mobile robots and LEGO Robotics, control theories, motion planning, trajectory generation, grasping and manipulation, robotic programming language, industrial robotics, manufacturing automation, and societal impacts. Hands-on projects. Not for credit in addition to CSE 378.
Prerequisites: MEC 262; U4 standing
3 credits

MEC 470 Introduction to Tribology
Focus is on the fundamentals of tribology, the science of surfaces in relative motion, with an introduction to friction, lubrication, and wear. The basics of tribology science: engineering surfaces, contact mechanics, lubrication theory, wear processes and modeling, wear properties of materials, and tribology test methods will be covered. Analysis of tribological aspects of mechanical components and bearings. Industrial case studies will be presented to place the topics in context to industry and society.
Prerequisites: MEC 363 and 364
3 credits

MEC 475 Undergraduate Teaching Practicum
Students assist the faculty in teaching by conducting recitation or laboratory sections that supplement a lecture course. The student receives regularly scheduled supervision from the faculty instructor. May be used as an open elective only and repeated once.
Prerequisites: U4 standing; a minimum g.p.a. of 3.00 in all Stony Brook courses and the grade of B or better in the course in which the student is to assist, permission of department
3 credits

MEC 488 Mechanical Engineering Internship
Participation in off-campus engineering practice. Students are required to submit a proposal to the department at the time of registration and two term reports before the end of the second semester. May be repeated up to a limit of 12 credits.
Prerequisite: Permission of undergraduate program director
3-9 credits, S/U grading

MEC 490, 491, 492 Topics in Mechanical Engineering
Treatment of an area of mechanical engineering that expands upon the undergraduate curriculum. Topics may include advanced material in a specialty, development of a specialized experimental technique, or a specific area of design. Topics may vary from semester to semester. Semester supplements to this Bulletin may contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: U3 or U4 standing in a B.E. degree major; permission of department (course prerequisites vary with topic)
1-5 credits per course

www.stonybrook.edu/ugbulletin 465

Spring 2007: updates since Fall 2006 are in red

MEC 489 Unconventional Energy Applications
Introduction to the use of unconventional energy (e.g., solar, tidal, geothermal, biomass, wind) and its integration into the existing energy infrastructure. Topics may include advanced material in a specialty, development of a specialized experimental technique, or a specific area of design. Topics may vary from semester to semester. Semester supplements to this Bulletin may contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: U3 or U4 standing in a B.E. degree major; permission of department (course prerequisites vary with topic)
1-5 credits per course
MEC 495 Professional Engineering Seminar
Prepares the student to enter the workplace as a practicing engineer. Topics include professional ethics, professional activities, professional engineering licensing, patents, seeking entry-level employment, and exposure to the engineering work environment. Aids in preparation for the EIT/FE exam. Includes speakers from a variety of disciplines, within the College and from industry.
Prerequisites: CEAS major; U4 standing
1 credit, S/U grading

MEC 499 Research in Mechanical Engineering
An independent research project under the supervision of a mechanical engineering faculty member. Permission to register requires the agreement of the faculty member to supervise the research and submission of a one-page research proposal. May be repeated but only six credits of research electives may be counted as technical electives.
Prerequisite: Permission of department
0-3 credits
MUS 101-D Introduction to Music
The basic concepts of music such as melody, harmony, rhythm, counterpoint, and form are studied through investigation of the historical and contemporary masterpieces of the Western classical tradition, of various non-Western musics, and of various “popular” traditions. The different styles and types of music are considered not only in light of the cultural values they embody, but also in relation to present-day cultural and musical values. No previous musical training is assumed. Not for credit after MUS 130. 3 credits

MUS 105-G Music Cultures of the World
An introduction to selected musical genres and styles from around the world with an emphasis on music making in relation to the social and cultural practices of various peoples. Not for music major credit. 3 credits

MUS 119-D The Elements of Music
Beginning with the rudiments of music, such as meter, tempo, rhythm, and how to read notes in several clefs, this “hands on” course goes on to examine how music is organized, covering scales, keys, intervals, chords, form, and style in classical music. Students also compose throughout the semester and sharpen their listening skills through attendance at concerts. Serves as prerequisite to many music department courses. 3 credits

MUS 120 Elementary Musicianship
Beginning ear-training, including harmonic, rhythmic and melodic dictation, interval and chord recognition, and sight-singing of diatonic melodies. Intended for students who are not prepared to enter MUS 121 but who aspire to be music majors. May be repeated, but credit counts toward graduation only once. Not for music major credit. Prerequisite: MUS 119 or 130 or placement by undergraduate musicianship examination 2 credits

MUS 121 Musicianship I
Sight-singing, dictation, and transcription of melodic, harmonic, and rhythmic material. Prerequisite: Placement by undergraduate musicianship examination (consult department concerning dates) Corequisites: MUS 122 and 321 2 credits

MUS 122 Beginning Keyboard
Basic keyboard skills, including reading in clefs and rudimentary technical competence. Prerequisite: Placement by undergraduate keyboard examination Corequisites: MUS 121 and 321 1 credit

MUS 130-D Sound Structures
Development of strategies for informed listening, analysis, and writing about music. Topics include timbre and sonority, meter and rhythm, melodic design, form, organization of pitch and harmony, and interactions between music and language. Repertory is drawn from a wide range of historical periods and cultural contexts. Considerable emphasis on writing and on acquiring concepts and vocabulary appropriate to diverse types of music. Prerequisite: Primarily intended for prospective music majors and minors; others with sufficient musical background by permission of instructor. 3 credits

MUS 141, 142 Keyboard Harmony A, B
Practical studies in music theory through basic keyboard exercises. Prerequisite to MUS 141: MUS 122 Corequisites to MUS 141: MUS 220 and 321 Prerequisite to MUS 142: MUS 141 Corequisites to MUS 142: MUS 221 and 323 1 credit per course

MUS 161 to 187 Performance Study
A 45-minute individual lesson each week, with five hours of practice required. Students are required to play for a jury at the end of each term. Open to music majors and, enrollment permitting, to other students with a serious interest in music. May be repeated. Prerequisite: Audition required 2 credits per course

MUS 161 Piano
Corequisite: MUS 391

MUS 163 Harpsichord
Corequisite: MUS 391

MUS 165 Violin
Corequisite: MUS 262

MUS 166 Viola
Corequisite: MUS 262

MUS 167 Cello
Corequisite: MUS 262

MUS 168 String Bass
Corequisite: MUS 262 or 263 or 264

MUS 169 Classical Guitar
Corequisite: MUS 391

MUS 170 Flute
Corequisite: MUS 262 or 263 or 264

MUS 171 Oboe
Corequisite: MUS 262 or 263

MUS 172 Clarinet
Corequisite: MUS 262 or 263

MUS 173 Bassoon
Corequisite: MUS 262 or 263

MUS 175 Horn
Corequisite: MUS 262 or 263 or 264

MUS 176 Trumpet
Corequisite: MUS 262 or 263 or 264

MUS 177 Trombone
Corequisite: MUS 262 or 263 or 264

MUS 180 Percussion
Corequisite: MUS 262 or 263 or 264

MUS 182 Voice
Corequisite: MUS 261

MUS 187 Other Instruments
Corequisite: MUS 262 or 263 or 264

MUS 189 Beginning Jazz Improvisation
Beginning study of jazz theory, nomenclature, and chord-scale relationships as they relate to the playing of improvised jazz solos. In-class performances and transcription analysis are an integral part of the course. May be repeated. Prerequisite: Audition required 1 credit

MUS 208 Technology in the Arts
A multidisciplinary, hands-on introduction to the concepts and techniques of computer-influenced art, combining art, music, and theatre. Students explore computer creation and manipulation of sounds and images, as well as various ways of combining them. Current creative work using these techniques is studied. Additional hours in Laboratory for Technology in the Arts or Fine Arts SINC site required. This course is offered as MUS 208, ARS 208, and THR 208. Prerequisite: One 200-level ABS, MUS or THR course 3 credits

MUS 220 Musicianship II
Sight-singing, dictation, and transcription of more complex melodic, harmonic, and rhythmic material, including diatonic chord progressions. Prerequisites: MUS 141 and 220 Corequisites: MUS 142 and 323 2 credits

MUS 221 Musicianship III
Advanced sight-singing and dictation, including modal, modulating, and chromatic melodies; chord progressions and diatonic and modulating chorales; and complex rhythms. Prerequisites: MUS 141 and 220 Corequisites: MUS 142 and 323 2 credits

MUS 261 Stony Brook Chorale
Study and performance of a repertory from the Middle Ages to the present. Grading is based upon attendance. Ability to read music is required; advanced sight-reading is not. May be repeated. Prerequisites: Audition, held at first class meeting; ability to read music 1 credit

MUS 262 University Orchestra
Study and performance of works from the repertory of the concert orchestra. Grading is based upon attendance. May be repeated. Prerequisite: Audition required 1 credit

MUS 263 University Wind Ensemble
Study and performance of works for ensembles of woodwinds, brass, and percussion in various combinations. Grading is based upon attendance. May be repeated. Prerequisite: Audition required 1 credit

MUS 264 Big Band Jazz Ensemble
Study and performance of works for jazz ensemble. Grading is based on attendance. May be repeated. Prerequisite: Audition required 1 credit

MUS 265 Workshop in Performance
Practice in performance skills in a small group workshop setting under the guidance of a performance instructor. May be repeated. Prerequisite: Audition required 1 credit

MUS 266 Guitar Workshop
An overview of guitar technique and fingerboard harmony, featuring in-class performance, transcription oftablature systems, and arranging for solo guitar. May be repeated. Prerequisite: Audition required 1 credit

MUS 267 Jazz Combo
Arranging and extended improvising skills for the small jazz ensemble. Emphasis on in-class performances, transcription assignments, and learning standard jazz compositions. May be repeated. Prerequisite: Audition required 1 credit
MUS 268 Stony Brook Seawolves Marching Band
The study and performance of music from the marching band repertoire. The course requires attendance at a marching band camp prior to the beginning of the Fall term. Attendance at home games and one away game is also required. Grading is based on attendance. May be repeated for credit. 1 credit

MUS 289 Intermediate Jazz Improvisation
Intermediate study of jazz theory, nomenclature, and chord-scale relationships as they relate to the playing of improvised jazz solos. In-class performances and transcription analysis are an integral part of the course. May be repeated. Prerequisite: Audition required 1 credit

MUS 290 Vocal Repertory
Performance and analysis of works from the vocal repertory. May be repeated. Corequisite: MUS 182 or 382 1 credit

MUS 300-H Music, Technology, and Digital Culture
Study of the interactions between music, technology, and culture in popular and concert music since World War I. Issues of production, distribution, and reception, involving such topics as the impact of radio on composition in the 1920s and 1930s, early synthesizers, and the rise of electronic music, digital sampling and DJs, the MP3 phenomenon, cross-cultural borrowings, gender and technology, the internet, interactivity, and new models of consumption. Not for major credit. Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130 3 credits

MUS 301-I Music of the Baroque
The development during the late Renaissance of a new style in Italy and elsewhere is traced through opera and oratorio, cantata and choralé, concerto, suite, and trio sonata, to its ultimate expression in the works of Handel, Bach, and their contemporaries. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 302-I The Music of J.S. Bach
Study of the vocal and instrumental works of Johann Sebastian Bach, considering the cultural and musical traditions in which they were grounded and their continuing impact on musical developments from the Bach revival of the 19th century to the "authentic" performance practice movement of the 20th century. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 303-I The Music of Beethoven
Study of the symphonic, vocal, and chamber music of Ludwig van Beethoven, one of the pivotal composers of the Western world, through consideration of the cultural and musical context of late 18th- and early 19th-century Europe and of the heroic image of Beethoven in the 20th century. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 304-K Contemporary Traditions in American Music: 1900 to the Present
Study of the development of diverse 20th-century musical traditions in the U.S. from the perspectives of the musical structures and social contexts that define an "American music." The traditions of jazz, blues, musical theatre, folk music, and popular music are considered, for instance, with respect to such issues as how historical events, race, and gender affect the production and reception of music, how philosophical beliefs shape musical composition, and how technological changes resulted in the music "consumer." Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 305-G Music in the Romantic Era
The expressive art of the century between the birth of Schubert and the death of Brahms is examined in selected major figures such as Berlioz, Mendelssohn, Chopin, Schumann, Liszt, Wagner, and Verdi. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 305-J Advanced repertoire
The study and performance of music from the Baroque, through the late 19th century to the present. The course will concentrate on the development of styles from Haydn, Mozart, and Beethoven through the Romantics, Brahms, and Mahler, concluding with the transformation of the symphonic idea in works of Stravinsky and Webern. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 307-I Imaginative Worlds of Opera
Considering opera’s blend of drama, music, spectacle, and stage action, the course examines diverse European operatic traditions from a variety of angles, ranging from expressive roles for music to social and cultural values embodied in individual works. Study focuses on outstanding repertoire pieces such as Mozart’s Marriage of Figaro, Verdi’s Otello, and Berg’s Wozzeck. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 308-K History of Jazz
Historical survey of jazz styles from their antecedents in the late 19th century and early ragtime and blues, through New Orleans jazz, swing, bebop, “cool” jazz, “free” jazz, fusion, and Latin styles. Guidance in the appreciation of jazz and related musics, musical analysis of representative works, and demonstrations of improvisation. Jazz as an expression of cultural pluralism. Not for music major credit. Prerequisite: MUS 101 or 109 or 119 or 130 3 credits

MUS 309-G Music Since 1900
An introduction to the variegated and rapidly changing trends of the last and current centuries, including impressionism, expressionism, neoclassicism, twelve-tone and other serialism, chance and texture music, electronic and computer music, as well as styles derived from folk music, jazz, and other forms of popular music. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 310-K Music and Culture in the 1960s
The music of Bob Dylan, John Cage, the Beatles, Pauline Oliveros, Ornette Coleman, Elliot Carter, John Coltrane, Laura Nyro, and others is studied in conjunction with texts from or criticism of the 1960s. Music and texts are correlated through the topics of chaos, protest, Black culture, technology, the women’s movement, youth culture, and others. Not for music major credit. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 311-J Topics in Non-Western Music
A survey of 20th-century musical styles within a selected non-Western area. Individual genres are examined in terms of their musical features and in their relationship to aspects of life such as religious observance, social relations, issues of ethnic and national identity, migration, and transnational cultural exchange. Not for music major credit. Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130 3 credits

MUS 312-J Music in the Middle East
A survey of traditional and contemporary musics of Turkey, Iran, Israel, and the Arab world. Musics of rural and urban communities are examined both in terms of their structure and style, and in the ways that they relate to aspects of Middle Eastern life such as religious observance, social relations, ethnic and national identity, modernization, and emigration. Not for music major credit. Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130 3 credits

MUS 313-G Cross-Cultural Musics from Stravinsky to World Beat
An investigation into cross-cultural exchanges in Western and non-Western classical and popular musics in the 20th century, exploring the political and social contexts of the role of technology in, and the aesthetic and ethical implications of musical borrowings. Among the topics covered are turn-of-the-century exoticism, uses of folk music by classical composers, mutual borrowings between the West and Indonesia, Middle Eastern music and the West, and Paul Simon and the music of South Africa. Not for music major credit. Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130 3 credits

MUS 314-G Women Making Music
A study of the contributions made by women to music-making in various contemporary and historical cultures of the world, with emphasis on Western traditions. Topics include women as composers, performers, and listeners; genres designed for women; women’s roles in relation to men’s; gender implications in musical style; and depictions of women in musical dramas. All types of music are considered: “classical,” rock, pop, folk, jazz, various “fusions,” and non-Western musics such as those from India, China, Indonesia, and the Middle East. This course is offered as both MUS 314 and WST 314. Prerequisite: MUS 101 or 119 or 130 3 credits

MUS 315 The Structural Principles of Music I
An introduction to the language and basic structural concepts of the art of tonal music through the study of such elements as melody, rhythm, harmony, counterpoint, and form; analysis, written exercises, and discussion of theoretical principles. Not for music major credit. Prerequisite: MUS 119 3 credits
MUS 316 The Structural Principles of Music II
An introduction to the language and basic structural concepts of the art of 20th-century music through the study of such elements as melody, rhythm, harmony, counterpoint, and form; analysis, written exercises, and discussion of theoretical principles. Not for music major credit.
Prerequisite: MUS 315
3 credits

MUS 317 Interactive Performance, Media, and MIDI
Practical and theoretical issues related to interactive performance, combining elements of art, music, theatre, performance art, video, and computer science. Course topics include sound synthesis, sampling, video, lighting, alternative input, and MIDI. This hands-on course stresses small experimental-creative laboratory assignments and culminates in final small-group or individual projects. Additional hours in Laboratory for Technology in the Arts or Fine Arts SINC site required. This course is offered as ARS 317, MUS 317 and THR 317.
Prerequisite: At least one 200- or 300-level ARS, MUS, or THR studio or performance course
3 credits

MUS 318 Music and the Moving Image
An investigation of the relationship between music and film and video. Students script, shoot, edit, and create short videos with soundtracks, exploring different aspects of visuals and music. All editing is done digitally. Works may be made for screen, installation, or performance. Also examines historical and contemporary artistic exploration with such media. Meets in the Laboratory for Technology and the Arts. This course is offered as ARS 318, MUS 318, and THR 318.
Prerequisites: One ARS, MUS, or THR course; familiarity with the use of computers
Advisory Prerequisite: ARS/MUS/THR 208 or ARS/MUS/THR 317 or ARS 225
3 credits

MUS 319-I Music in Latin America
Survey of music originating in Latin America, featuring both a historical overview and in-depth case studies from various parts of the region. Musical types covered may include: the local, traditional, and folkloric styles; the mediated and hybrid styles generally associated with urban youth populations; and music of the Latin American concert repertoire. The music is studied with respect to the ways it has served as a vital means through which to articulate ethnicity, nationality, modernity, and other key aspects of individual and social identity.
Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130
3 credits

MUS 320-G U.S. Popular Music
The study of popular music in the United States. Topics may include popular music in the U.S. since 1945; American popular music of colonial times; and American musical theatre. The course explores such aspects as musical structure and form, the nature of the commercial music industry, and how issues of gender, race, geography, economics, and technology affect the creation, performance, and reception of popular music. Not for music major credit.
Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130
3 credits

MUS 321 Tonal Harmony I
Tonal harmony taught through practice in homophonic writing, including the harmonization of chorales. Students study excerpts from the musical repertoire as it pertains to questions of musical construction.
Corequisites: MUS 121 and 122
3 credits

MUS 322 Tonal Harmony II
Practice in homophonic writing, including the harmonization of chorales, including diatonic harmonies, altered chords, and modulation.
Prerequisites: MUS 121, 122, and 321
Corequisites: MUS 141 and 220
3 credits

MUS 323 Techniques of Music, 1880 to the Present
Study and practice in the techniques used in the late 19th and 20th centuries to organize pitch, rhythm, tone color, and dynamics.
Prerequisites: MUS111, 220, and 322
Corequisites: MUS 142 and 221
3 credits

MUS 331 Musicianship IV
Sight-singing and dictation of complex tonal, modal, and atonal material. Special emphasis on melodic, harmonic, and rhythmic idioms characteristic of 20th-century music.
Prerequisites: MUS 221, 142, and 322
2 credits

MUS 339 Beginning Composition
Individual projects in composition discussed and criticized in class. Enrollment limited to eight. May be repeated once.
Pre- or Corequisite: MUS 323
3 credits

MUS 340 Introduction to Music Technologies
An introduction to the computer-based technologies that are changing the art of music. Hands-on experience with hard-disk recording and sound manipulation, MIDI, sequencing, notation programs, sound module programming, and using the Web. Exploration of the impact of these technologies on aesthetic choices. Significant time in the computer lab required.
Prerequisites: MUS 130 and 322
3 credits

MUS 350-G Western Music Before 1600
The vibrant traditions of Western music from Gregorian chant and the beginnings of polyphony to the suave motets of Palestrina and the expressive madrigals of Monteverdi. Emphasis is on learning to think historically, on development of writing skills, and on cultivation of listening skills.
Prerequisites: MUS 130, 141, 220, and 321
4 credits

MUS 351-I Western Music 1600-1830
Musical traditions in early modern Europe from Monteverdi through Beethoven. Study of diverse genres such as opera, cantata, symphony, and string quartet within their cultural contexts. Focus is on the understanding of historical processes, on academic prose writing, and on comprehension of complex musical structures.
Prerequisites: MUS 321 and 350
5 credits

MUS 352-G Western Music from 1830 to the Present
Western musical traditions from Schubert through David Lang, John Zorn, and Laurie Anderson. Consideration of the central genres of orchestral, vocal, and chamber music and their transformations by various cultural and technological forces. Focus on music stylistic change and proliferation, and on academic writing about music.
Prerequisites: MUS 322 and 351
5 credits

MUS 355-G Special Topics in Music
Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: One of the following: MUS 101, 105, 106, 119, or 130
3 credits

MUS 361 to MUS 387 Advanced Performance Study
A one-hour individual lesson each week, with 15 hours of practice required. Open only to students with adequate preparation who demonstrate a professional commitment to the performance of music. Lessons are taught either (a) by a member of the music faculty, (b) by a teaching assistant, or (c) by an approved off-campus teacher. Students are required to play for a jury at the end of each term. May be repeated.
Prerequisite to MUS 361-387: Audition required
1 credit per course

MUS 361 Piano
Corequisite: MUS 391
3 credits

MUS 363 Harpsichord
Corequisite: MUS 391
3 credits

MUS 365 Violin
Corequisite: MUS 262
3 credits

MUS 366 Viola
Corequisite: MUS 262
3 credits

MUS 367 Cello
Corequisite: MUS 262
3 credits

MUS 368 String Bass
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 369 Classical Guitar
Corequisite: MUS 391
3 credits

MUS 370 Flute
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 371 Oboe
Corequisite: MUS 262 or 263
3 credits

MUS 372 Clarinet
Corequisite: MUS 262 or 263
3 credits

MUS 373 Bassoon
Corequisite: MUS 262 or 263
3 credits

MUS 375 Horn
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 376 Trumpet
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 377 Trombone
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 380 Percussion
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 382 Voice
Corequisite: MUS 261
3 credits

MUS 387 Other Instruments
Corequisite: MUS 262 or 263 or 264
3 credits

MUS 388 Fundamentals of Accompanying
Development of skills required of an accompanist, including sight-reading and instrumental and vocal accompaniment. Specific accompanying assignments are made throughout the semester. May be repeated once.
Prerequisite: MUS 161 or 361
2 credits

www.stonybrook.edu/ugbulletin 469

Spring 2007: updates since Fall 2006 are in red

COURSE DESCRIPTIONS
MUS 389 Advanced Jazz Improvisation
Advanced study of jazz theory, nomenclature, and chord-scale relationships as they relate to the playing of improvised jazz solos. In-class performances and transcription analysis are an integral part of the course. May be repeated.
Prerequisite: Audition required
1 credit

MUS 391 Chamber Music
Ensembles formed by students enrolled in MUS 161 to 187 or MUS 361 to 387 Performance Study. Two hours of rehearsal per week under the supervision of a faculty member or graduate assistant. May be repeated.
Corequisite: Enrollment in private lessons, MUS 161 through 187, as appropriate
1 credit

MUS 421 Analysis of Tonal Music
An examination, through the study of selected works, of the action and interaction of harmonic progression, rhythm, meter, motif, texture, and line in defining and articulating tonal structures.
Prerequisite: MUS 322
Corequisite: MUS 331
Advisory Prerequisite: MUS 351
Advisory Corequisite: MUS 352
3 credits

MUS 422 Analysis of Post-Tonal Music
Music to be studied is selected from representative works by Debussy, Bartok, Schoenberg, Stravinsky, Webern, and other composers of the 20th and 21st centuries.
Prerequisite: MUS 421
Advisory Prerequisite: MUS 352
3 credits

MUS 432 Tonal Counterpoint
A study of the art of combining voices under the conditions of tonal harmony as observed in works from Bach through the romantic composers.
Prerequisite: MUS 322
Advisory Prerequisite: MUS 351
3 credits

MUS 434 Orchestration
The possibilities and limitations of the commonly used instruments, conventions of notation, and practice in scoring for various ensembles.
Prerequisite: MUS 322
Advisory Prerequisite: MUS 323, MUS 350-352
3 credits

MUS 437 Electronic Music
Historical background, musical works, aesthetic concepts and creative approaches to electronic music. Basic acoustics and sound engineering skills; electronic/live sound production, recording, modification, and editing; critical listening, improvisation, timbral design; musique concrete and live performance will be included. Studio work includes technical practice and creative assignments. Technical background is not required.
Prerequisite: MUS 321; permission of instructor
3 credits

MUS 439 Composition
Open only to students demonstrating sufficient aptitude and capacity for original work. May be repeated.
Prerequisite: Permission of instructor
Advisory Prerequisite: MUS 339
3 credits

MUS 450 Seminar in the History of Music
Advanced study of a topic in music history for music majors. Topics may include study of major composers, major genres, dramatic music, the relation of music and poetry in song, or an historically or geographically defined musical style. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Advisory Prerequisites: MUS 350-352; MUS 322 or 323, depending on topic
3 credits

MUS 475, 476 Undergraduate Teaching Practica I, II
Each student receives regularly scheduled supervision from the instructor of the course specified as the forum for the practicum. Responsibilities may include conducting recitation sections of lower-division courses, preparing material for practice or discussion, and helping students with course problems. In MUS 475, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice.
Prerequisites to MUS 475: U3 or U4 standing; music major; permission of instructor and department
Prerequisites to MUS 476: MUS 475; permission of instructor and department
3 credits per course, S/U grading

MUS 487 Independent Project
Individual study under the guidance of a faculty member leading to a major essay or composition. May be repeated.
Prerequisites: Permission of instructor; approval of department’s undergraduate studies committee
0-6 credits

MUS 488 Internship
Internship projects arranged in consultation with a faculty member and an outside agency.
Prerequisites: U3 or U4 standing; 15 credits in music department courses; permission of department
0-6 credits, S/U grading

MUS 491 Conducting
Manual technique and the analysis and preparation of scores for performance. May be repeated.
Prerequisites: MUS 322; permission of instructor
Corequisite: MUS 261 or 262 or 263
3 credits
MVL

Medieval Studies

MVL 141-B The Legend of King Arthur
A study of the development of the legend of King Arthur from the earliest references in medieval English chronicles through the flowering and fixing of the tradition in French and German literary works of the High and Late Middle Ages. Among the texts considered are works by Bede, Giraldus Cambrensis, Geoffrey of Monmouth, Chretien de Troyes, Wolfram von Eschenbach, and Hartmann von Aue.
3 credits

MVL 241-G Heroes and Warriors
A study of the warrior-hero in Western literature from the Greeks through the Middle Ages. Works include Homer’s Iliad, the Poetic Edda, The Lay of Hildebrand, Beowulf, The Lay of the Nibelungen, and the Song of Roland.
Advisory Prerequisite: One course in medieval history or literature
3 credits

MVL 447 Independent Readings and Research
Independently supervised readings in selected topics in medieval studies. May be repeated.
Prerequisites: Permission of instructor and department
1-3 credits

MVL 475, 476 Undergraduate Teaching Practica I, II
Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled classes. The student is required to attend all the classes, do all the regularly assigned work and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. In MVL 47, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice.
Prerequisites to MVL 475: U3 or U4 standing; permission of instructor and department
Prerequisites to MVL 476: MVL 475; permission of instructor and department
3 credits per course, S/U grading
PHI

Philosophy

PHI 100-B Concepts of the Person (II)
An historical introduction to philosophy through readings and discussion on topics such as human identity, human understanding, and human values.
3 credits

PHI 101-G Historical Introduction to Western Philosophy (I)
An introduction to pivotal theories of the Western philosophical tradition. Readings may be drawn from ancient Greek, medieval, and modern classics of philosophy. Topics may include philosophical theories of politics, morality, logic, metaphysics, knowledge, anthropology, art, and religion.
3 credits

PHI 103-B Philosophic Problems (II)
An introduction to philosophy through the analysis of one or more aspects of contemporary life such as technology, war, international relations, families and friendships, or race, class and gender. A variety of texts are used.
3 credits

PHI 104-B Moral Reasoning (II)
An introduction to philosophy through inquiry into the formation, justification, and evaluation of moral judgments. Students are introduced to the major theories and problems of ethics, such as utilitarianism, Kant’s categorical imperative, ethical relativism, egoism, and classical conceptions of the good and virtue. Against this background students engage in discussions of contemporary moral issues.
3 credits

PHI 105-G Politics and Society (II)
An historical introduction to philosophy through an analysis of political theories, theories of action, and styles of political life. Main themes include the relation of the individual to the state, the scope of social responsibility, and the nature of human freedom.
3 credits

PHI 108-B Logical and Critical Reasoning (II)
The principal aim of this course is to help a student acquire the skills of thinking, reading, and writing critically. The student develops a sensitivity to language and argumentation that is applicable to a wide range of situations and subject matters.
3 credits

PHI 109-B Philosophy and Literature in Social Context (III)
The role of literature and philosophy in understanding and critically assessing personal experience and social life. The links among literary texts, philosophical issues, and political and social commitments are explored. Topics include the relations between language and experience, the role of philosophical thinking through literary texts, and the significance of literary expression in different cultural and historical situations. This course is offered as both HUM 109 and PHI 109.
3 credits

PHI 110-B Arts and Ideas (III)
An introduction to the historical and comparative study of the various arts in relation to the philosophical ideas that prevailed at the same time. At least four significantly different historical periods of intense creative activity—such as ancient Greece, the Renaissance, the 18th or 19th century in the West, ancient China, T’ang or Sung dynasty China, Heian or Muromachi period Japan, and the contemporary age—are studied in terms of the interconnections between philosophical theorizing and artistic practice.
3 credits

PHI 111-B Introduction to Eastern Philosophy (I)
An introduction to different systems of Eastern philosophy and the main classical texts drawn from Hinduism, Buddhism, Taoism, Confucianism, and Neo-Confucianism. Efforts are made to recover the different modes of knowledge, language, identification, and liberation dealt with in these texts.
3 credits

PHI 200-G Introduction to Ancient Philosophy (I)
Readings and discussion of the major Greek and Roman thinkers, e.g., the pre-Socratics, Plato, Aristotle, the Stoics, and Plotinus.
Advisory Prerequisite: U2 standing or one course in philosophy
3 credits

PHI 206-G Introduction to Modern Philosophy (17th and 18th century) (I)
Readings and discussion of the major thinkers of the 17th and 18th centuries, e.g., Descartes, Leibniz, Spinoza, Hobbes, Locke, Berkeley, Hume, and Kant.
Advisory Prerequisite: U2 standing or one course in philosophy
3 credits

PHI 208-G Introduction to 19th-Century Philosophy (I)
Readings and discussion of the major thinkers of 19th-century Europe, e.g., Kant, Hegel, Comte, Marx, Mill, Schopenhauer, and Nietzsche.
Advisory Prerequisite: U2 standing or one course in philosophy
3 credits

PHI 220-C Introduction to Symbolic Logic (II)
This first course in symbolic logic emphasizes the development of systematic techniques for assessing the validity of arguments: truth tables and truth values analysis, Venn diagrams, elementary quantification theory, and deduction in both the propositional calculus and quantification theory.
Prerequisite: Satisfaction of entry skill in mathematics requirement
Advisory Prerequisite: U2 standing or one course in philosophy
3 credits

PHI 230-H The Nature and Practice of Science (III)
An examination of the scientific experience. A particular scientific discovery, such as nuclear fission and its exploitation, is followed from its origins to explore the influences of historical, social, technological, and philosophical forces on science. The nature of discovery; the interplay between experiment and theory; technology and the environment; paradigm shifts; science and gender; the difference between fraud and error; and self-discovery are considered.
Prerequisite: U2 standing or one course in philosophy
Advisory Prerequisite: One D.E.C. category E course
3 credits

PHI 247-G Existentialism (I)
Readings in existential philosophy and literature with special emphasis on such themes as alienation, anxiety, nihilism, absurdity, the self, value, death, and immediacy. Existentialist categories are used to interpret contemporary lifestyles and culture.
Prerequisites: U2 standing; one course in philosophy
3 credits

PHI 249-G Marxism (I)
A study of Marxism as a philosophical system. Topics include the development of Marxism out of German idealism; the contributions of Marxism to political and social philosophy; and the influence of Marx on subsequent thinkers, e.g., Althusser, Habermas, and Foucault.
Prerequisite: U2 standing or one course in philosophy
Advisory Prerequisite: PHI 105
3 credits

PHI 264-D Philosophy and the Arts (III)
A study of the arts focusing on the nature of the creative process, methods of interpretation, essential differences among the various arts, and the relation of performance to text.
Advisory Prerequisite: U2 standing or one PHI, ARH, MUS, or THR course
3 credits

PHI 277-G Political Philosophy (II)
An inquiry into the function of philosophic principles in political thought and action, with readings drawn from such authors as Plato, Aristotle, Machiavelli, Spinoza, Hobbes, Locke, Kant, Hegel, Mill, and Dewey.
Prerequisite: U2 standing or one course in philosophy
Advisory Prerequisite: PHI 105
3 credits

PHI 284-G Introduction to Feminist Theory
The social construction of gender and how this construction affects philosophical thought and practice. The course provides an introductory survey of current feminist issues and analyses. It also examines the meaning of feminism for philosophy by examining the effect of introducing a political analysis of gender into a discipline that is supposedly universal and neutral.
This course is offered as both PHI 284 and WST 284.
Advisory Prerequisite: U2 standing or one PHI or WST course
3 credits

PHI 285-G The Uses of Philosophy (III)
Introductory study of the bearing of philosophic considerations on the special arts and sciences. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Advisory Prerequisite: U2 standing or one course in philosophy
3 credits

PHI 300-I Ancient Philosophy (I)
Advanced studies in selected Greek thinkers from the pre-Socratics to the classical Athenian philosophers and the Hellenistic schools.
Prerequisites: Two courses in philosophy
Advisory Prerequisite: PHI 200 or 206 or 208
3 credits

PHI 304-I Medieval Philosophy (I)
Study of the writings of major thinkers from Augustine to William of Ockham.
Prerequisites: Two courses in philosophy
Advisory Prerequisite: PHI 200
3 credits
PHI 306-I Modern Philosophy (I)  
Advanced studies in selected thinkers such as Descartes, Vico, Spinoza, Locke, Berkeley, Hume, and Mill.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: One of the following: PHI 200, 206, 208, 247, or 300  
3 credits

PHI 308-I 19th-Century Philosophy (I)  
Study of major figures in 19th-century thought, such as Hegel, Schopenhauer, Marx, Mill, Nietzsche, Kierkegaard, Spencer, and Comte.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: One of the following: PHI 200, 206, 208, 247, 300, or 306  
3 credits

PHI 309-I 20th-Century Philosophy (I)  
A study of selected major philosophical problems and movements during the 20th century, e.g., logical positivism, the problem of induction, incommensurability, meta-ethics, the linguistic turn, deconstruction, foundationalism, and anti-foundationalism.

Prerequisites: Two philosophy courses  
Advisory Prerequisite: One of the following: PHI 206, 208, 220, 230, 306, 308, 310  
3 credits

PHI 310-K American Philosophy (I)  
A study of selected major figures in the history of American philosophy, e.g., Jefferson, Emerson, Edwards, James, Peirce, Dewey, Whitehead, and Santayana. American history is viewed through the lens of American philosophies such as pragmatism and transcendentalism.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: One of the following: PHI 200, 206, 208, 247, 300, 306, or 308  
3 credits

PHI 312-I Topics in Contemporary European Thought (I)  
Topics in major developments in contemporary European philosophy from 1900 to the present. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: One of the following: PHI 200, 206, 208, 247, 300, 306, 309, or 310  
3 credits

PHI 315 Majors' Introductory Seminar A  
Seminar using various philosophical texts as a basis for intense study, discussion, and extensive writing. Designed for new or intending philosophy majors, the course provides training in the skills of writing and reading required for success in the major. Authors selected for study and discussion may be taken from any historical period; texts provide experience in reading a variety of philosophical styles and outlooks.

Prerequisites: Two courses in philosophy; philosophy major  
3 credits

PHI 316 Majors' Introductory Seminar B  
Introduction to the major questions in philosophy today and to members of the philosophy faculty. One faculty member coordinates the course, and each week, a different faculty member assigns a reading, gives a presentation, and/or leads a discussion on a topic or area of current philosophical interest. Students respond in discussion and writing. Designed for new or intending philosophy majors, the course is intended to solidify reading and writing skills required for the major, as well as provide some acquaintance with what are currently the main topics or approaches to philosophy.

Prerequisites: Two courses in philosophy; philosophy major  
3 credits

PHI 320-G Metaphysics (II)  
An inquiry into the first principles of science, art, and action as these are treated by representative classical and modern authors.

Prerequisites: Two courses in philosophy  
3 credits

PHI 323-G Philosophy of Perception (II)  
An inquiry into the philosophical and methodological problems pertaining to sensing, perceiving, and observing the world. Major theories of classical and modern authors are considered.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: PSY 105  
3 credits

PHI 325-G Contemporary Philosophies of Language (II)  
A discussion of current topics in the philosophy of language, semiotics, and literary theory.

Prerequisites: Two courses in philosophy  
3 credits

PHI 330 Advanced Symbolic Logic (II)  
A study of such topics as a natural deduction system of quantification theory including consistency and completeness proofs; axiomatic formal systems and associated concepts of consistency, completeness, and decidability; elementary modal logic; and introductory set theory.

Prerequisite: PHI 220  
3 credits

PHI 332-G Theories of Knowledge (II)  
A study of a variety of conceptions of the structure and content of knowledge as found in classical and contemporary epistemologies. Fundamental methods and principles of philosophical inquiry are applied to questions about the ways in which concepts and theories are generated in the physical and social sciences and to questions about knowledge of what is of value, knowledge in philosophy, and knowledge in the arts.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: PSY 105  
3 credits

PHI 335-G Philosophy of Time (II)  
An inquiry into the nature of time as it is treated by philosophers of classical and modern times.

Prerequisites: One course in philosophy or physics  
3 credits

PHI 336-G Philosophy of Religion (II)  
A philosophical analysis of basic concepts, principles, and problems of religious thought. Topics may include faith and knowledge, religion and morality, divine attributes, arguments for and against the existence of God, and the problem of evil.

Prerequisites: Two courses in philosophy or one course in religious studies  
3 credits

PHI 340-J Philosophical Traditions of East Asia (I)  
A study of influences and confluences among major currents of thought in East Asia, surveying the major debates that shaped the great intellectual traditions of China and their transformation as they were assimilated in Korea and Japan. Particular attention is given to the rise of Neo-Confucian orthodoxy in East Asia and the philosophical and political reasons its basic concepts were challenged during the Ming, late Choson, and Tokugawa periods.

Prerequisites: PHI 111 or RLS 240 or 246 or 260; one other course in philosophy  
3 credits

PHI 342-J History of Chinese Philosophy (I)  
Readings in translation of the major texts of Chinese philosophy, including classical Confucianism and Taoism, Han dynasty developments of Confucianism and Taoism; the skepticism of Wang Ch’ung; the schools of Chinese Buddhism; Sung and Ming dynasty Neo-Confucianism.

Prerequisites: PHI 111 or PHI 240 or 246 or 260; one other course in philosophy  
3 credits

PHI 344-J Japanese Thought and Philosophy (I)  
An examination of major texts in Japan’s religious, poetic-artisanic, and philosophical traditions down to modern times. Topics may include Tendai, Shingon, Pure Land, and Zen Buddhism; the cultural forms of Shinto religiosity; aesthetic concepts such as miyabi; Tokugawa Neo-Confucianism and its impact on modern Japan; philosophical aspects of the modern Japanese novel; the Kyoto school of Buddhism.

Prerequisites: PHI 111 or RLS 240 or 246 or 260; one other course in philosophy  
3 credits

PHI 347-G Hermeneutics and Deconstruction (II)  
An exploration of the major assumptions, commitments, methods, and strategies of hermeneutics and deconstruction. The course examines how these two recent schools of thought have developed out of the contemporary philosophical scene and how they have had such a significant impact on literary theory, art criticism, text theory, social theory, and the history of philosophy.

Readings include selections from the writings of Heidegger, Gadamer, Jauss, Ricoeur, Derrida, Kristeva, Lyotard, Kolman, Irigaray, and others.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: PHI 247, 264, 306, 308, or 312  
3 credits

PHI 353-G Philosophy of Mind (II)  
Analysis of the major problems in the philosophy of mind, e.g., the mind-body problem, the problem of identity through time, the relation between thoughts and sensations, the problem of the knowledge of other minds.

Prerequisites: Two courses in philosophy  
Advisory Prerequisite: PSY 103  
3 credits

PHI 360-G Philosophy of Education (III)  
An inquiry into the function of philosophic principles in educational theories and institutions. The inquiry centers on the purposes of knowledge and education, the relations among the sciences and their organization into curricula, and the ways knowledge is acquired and transmitted.

Prerequisites: Two courses in philosophy, or one course in philosophy and one course related to education  
3 credits

PHI 363-G Philosophy of the Social Sciences (III)  
A study of the philosophical foundations of the social sciences, applying principles and methods of philosophical analysis to questions concerning the structures of social reality, the methodological and epistemological status of the social sciences, and the criteria for evidence and theory formation in the social sciences.

Prerequisites: One course in philosophy; completion of D.E.C. category F  
Advisory Prerequisite: PHI 105, 206, 249, or 277  
3 credits

www.stonybrook.edu/ugbulletin  473

Spring 2007: updates since Fall 2006 are in red
PHI 364-H Philosophy of Technology (III)
A systematic study of the interrelations of human beings and their social institutions with the surrounding world of nature and of technological artifacts. The impact of technological culture on human beliefs and perceptions of the world is explored. This course is interdisciplinary in scope, with readings from philosophy, anthropology, literature, history, environmental studies, and other areas where technology is of concern.
Prerequisites: One course in philosophy; completion of D.E.C. category E
3 credits

PHI 365-H Philosophy and Computers (III)
An investigation of topics at the interface between philosophy and computation drawing on classical and contemporary sources. Philosophical questions about computers, computation, information, logic, language, and mind, and the prospects for computer modeling as a tool in philosophical investigation.
Prerequisites: Two courses in philosophy
Advisory Prerequisite: PHI 220 or one course in computer science
3 credits

PHI 366-G Philosophy and the Environment (III)
Philosophical questions raised by human relations with the natural world, ranging from basic concepts such as nature, ecology, the earth, and wilderness, to the ethical, economic, political, and religious dimensions of current environmental problems, including the question of whether there are values inherent in nature itself beyond those determined by human interests alone.
Prerequisites: Two courses in philosophy, or one course in philosophy and completion of D.E.C. category E
3 credits

PHI 367-G Philosophy of War and Peace (III)
An investigation into the philosophical issues raised by war and peace. Topics may include theories of just war, the relationship between authority, state power and war, and the relationship between reason and the violent nature of history. The question of the origins, perseverance, and need of war, as well as what is peace and how it may be attained will be considered through the study of philosophers such as Plato, Aquinas, Kant, Hegel, Marx, William James, Hannah Arendt, and contemporary thinkers.
Prerequisites: Two courses in philosophy
Advisory Prerequisites: PHI 104 and 105
3 credits

PHI 368-H Philosophy of Science (III)
A course in the philosophy of science using both historical and contemporary materials. Methodological issues discussed include scientific explanation and prediction, the structure of theories, the nature of scientific revolutions, and the role of laws in science. Philosophic problems in understanding specific sciences and their relation to each other are also considered, as are their relations to other areas of philosophical concern, such as metaphysics.
Prerequisites: One course in philosophy; completion of D.E.C. category E
Advisory Prerequisites: PHI 206 and 230
3 credits

PHI 369 Philosophy of Mathematics (III)
An investigation of philosophical issues that arise in mathematics. Topics include foundational issues within mathematics (logicism, formalism, intuitionism, and platonism, as well as recent theories of mathematical naturalism); the nature and existence of mathematical objects; the nature of mathematical truth; the concept of set; reinterpretations of the history of mathematics.
Prerequisites: One course in philosophy; completion of D.E.C. category C
Advisory Prerequisites: PHI 206 and 220
3 credits

PHI 370-G Philosophical Psychology (III)
An examination of philosophical issues and some psychological theories concerning the nature of the person and the sources of the self. The course includes such topics as the dimensions of the person, the nature of conscious life, the scope of human cognition, and gender identity.
Prerequisites: One course in philosophy
Advisory Prerequisite: PHI 100 or 103 or 104
3 credits

PHI 372-G Ethical Inquiry (II)
An intensive study of the methodological principles governing the formation of ethical theories and ethical judgments through an investigation of selected ethical problems.
Prerequisites: PHI 104 and one other PHI course
Advisory Prerequisite: One of the following: PHI 108, 200, 206, 208, 300, 304, 306, 308, 309, 366
3 credits

PHI 373-G, 374-G Philosophy in Relation to Other Disciplines (III)
The study of philosophy as it affects and is affected by other disciplines such as anthropology, science, sociology, the history of ideas, theology, and psychology. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Prerequisites: Two courses in philosophy
3 credits per course

PHI 375-G Philosophy of Law (III)
An examination of the concept of law and the nature of legal reasoning. The course explores the relationship of law to other central philosophical and social ideas such as freedom, rights, morality, authority, welfare, property, justice, equality, and constitutionalism.
Prerequisites: Two courses in philosophy
3 credits

PHI 376-G Philosophy and Medicine (III)
An investigation of the role that philosophical concepts play in medical thinking and practice. The course focuses on the philosophical foundations of concepts of health and disease; concepts of right, responsibility, and justice relevant to medical practice; promise-keeping and truth-telling in the doctor-patient relationship; and specific moral problems that arise in medical practice.
Prerequisites: Two courses in philosophy
Advisory Prerequisite: HIS 257 or 258 or SOC/HMC 200 or HMC 331
3 credits

PHI 377 Contemporary Political Philosophy (II)
A critical examination of selected issues in contemporary political philosophy, for example, the nature and justification of basic rights, the legitimation of political authority, and the various relations between ideals of social justice and democratic rule. Readings represent contemporary views such as libertarianism, liberalism, socialism, communism, and feminism, and include selections by authors such as Rawls, Nozick, Dworkin, Walzer, Habermas, and Pateman. This course is offered as both PHI 377 and POL 377.
Prerequisites: Two courses in philosophy
Advisory Prerequisites: PHI 105 or 277 or 375; one upper-division political science course
3 credits

PHI 378-K Philosophical Topics in Asian American History (III)
Analysis and interpretation of Asian and American literature, film, law, and history to understand the experiences of Asians in the Americas and to reconceptualize the concepts of power, race, class, gender, and ethnicity from the era of the early immigration period through the present day, placed within a broad historical context, including consideration of social, political, economic, and cultural history and institutions. Semester Supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: One course in philosophy
3 credits

PHI 379-K Philosophy of Race (III)
Examination of our assumptions about race and the impact of those assumptions on issues concerning gender, class, and sexuality throughout American history. Readings include critical race theory, feminist theory, and critical legal theory. Students examine racial issues from a philosophical perspective and consider the ways in which representations of race may reinforce patterns of power and privilege. This course is offered as both AFH 379 and PHI 379.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: One course in philosophy
3 credits

PHI 380-G Literature and Philosophy (III)
An intensive study of the methods and principles of the philosophical analysis of literature and the relations between literature and philosophy. Primary texts are selected to demonstrate the precise nature of the relationship. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Prerequisites: One philosophy course; one literature course
Advisory Prerequisite: PHI 109 or 110
3 credits

PHI 381-G Aesthetics (II)
An intensive study of methods and principles specific to the philosophical analysis of art through selected classical texts in aesthetics (e.g., Plato’s Phaedrus, Aristotle’s Poetics, Kant’s Critique of Judgment, and Nietzsche’s The Birth of Tragedy). Discussions focus on such problems as the ontology of the work of art, its epistemological significance, the relation between fact and fiction, criteria of interpretation, or the political import of art. Readings in the classical texts may be supplemented by selections from contemporary authors.
Prerequisites: Two courses in philosophy; completion of D.E.C. category D course
Advisory Prerequisites: PHI 109 or 110; PHI 264
3 credits
PHI 383-G Philosophical Issues of Race and Gender (III)
Issues of race and gender and how the notion that racism and sexism are analogous forms of oppression aids and detracts from consideration of these issues. Examination of the dynamics of race and gender in various contexts such as activism, art, law, literature, the media, medicine, and philosophy. This course is offered as both PHI 383 and WST 383.
Prerequisite: U3 or U4 standing
Advisory Prerequisite: One PHI or WST course
3 credits

PHI 384-G Advanced Topics in Feminist Philosophy (III)
An intensive philosophical study of selected topics of feminist concern. Topics are selected to further the understanding of what effect feminism has upon traditional areas of philosophy as well as providing a detailed understanding of particular feminist theories. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes. This course is offered as both PHI 384 and WST 384.
Prerequisites: One PHI course; one WST course
Advisory Prerequisites: PHI/WST 284; one other PHI or WST course
3 credits

PHI 390 Topics in Philosophy
Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisites: Two courses in philosophy
3 credits

PHI 391-G Topics in Philosophy
Semester supplements to this Bulletin contain specific descriptions when course is offered. Past topics have included Introduction to Indian Philosophy, and Bergson. Semester supplements to this Bulletin contain specific descriptions when course is offered. May be repeated for credit as the topic changes. Designed for upper-division students, this course provides an in-depth study of a specific topic within humanities disciplines such as music, art, literature, religion, and philosophy. Students will be expected to demonstrate knowledge of the conventions and methods used in the humanities discipline(s) studied. May be repeated for credit as the topic changes.
Prerequisites: Two courses in philosophy
3 credits

PHI 400-G, 401-G Individual Systems of the Great Philosophers (I)
A detailed study of the works of a single great philosopher. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Prerequisite: One of the following: PHI 300, 304, 306, 308, 309, 310, or 312
3 credits per course

PHI 402-G Analysis of Philosophic Texts (I)
Detailed analysis of a major philosophical text. Semester Supplements to this Bulletin contain description when course is offered. May be repeated as the topic changes.
Prerequisite: One of the following: PHI 300, 304, 306, 308, 309, 310, or 312
3 credits

PHI 420 Advanced Topics in Philosophy (I, II, III)
An advanced course treating a specialized issue or topic in philosophy or in philosophy and another discipline. The content of the course is announced before the start of the term. Semester supplements to this Bulletin contain specific description when course is offered. May be repeated for credit as the topic changes.
Prerequisite: U4 standing or five courses in philosophy
3 credits

PHI 421 Research Tracks in Philosophy (I, II, III)
A survey of recent literature necessary to prepare a team of students in a Research Track for two additional semesters of collaborative research.
Prerequisite: Consent of Research Track faculty
3 credits

PHI 435 Senior Seminar
An intensive study of an issue, topic, figure, or historical period in philosophy intended to provide both a culminating experience and final integration for senior philosophy majors. This seminar emphasizes careful reading, rigorous discussion, and extensive writing at an advanced level. The content of the seminar is announced before the start of the term, and students are consulted on the content as it proceeds.
Prerequisites: U4 standing; six courses in philosophy; satisfaction of upper-division writing requirement for the philosophy major
3 credits

PHI 475, 476 Undergraduate Teaching Practica I, II
Work with a faculty member as an assistant in one of the faculty member’s regularly scheduled courses. The student is required to attend all the classes, do all the regularly assigned work, and meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. In PHI 476, students assume greater responsibility in such areas as leading discussions and analyzing results of tests that have already been graded. Students may not serve as teaching assistants in the same course twice.
Prerequisites: PHI 475; prior preparation in subject field; permission of instructor and director of undergraduate studies
3 credits per course, S/U grading

PHI 487 Readings and Research in Philosophy (II)
Advanced-level inquiry with individualized instruction in one particular philosophical style of reasoning. Consult undergraduate advisor for specific details. May be repeated.
Prerequisites: U4 standing in philosophy major; permission of department
0-6 credits

PHI 489 Readings and Research in the History of Philosophy (I)
Advanced-level inquiry with individualized instruction in the great philosophies of the past. Consult undergraduate advisor for specific details. May be repeated.
Prerequisites: U4 standing in philosophy major; permission of department
0-6 credits

PHI 490 Readings and Research in Philosophical Investigations of Other Disciplines (III)
Advanced-level inquiry with individualized instruction in the application of philosophical tools to one of the special disciplines. Consult undergraduate advisor for specific details. May be repeated.
Prerequisites: U4 standing in philosophy major; permission of department
0-6 credits

www.stonybrook.edu/ugbulletin