

REL 307 The Christian Tradition 3(3,0) Examination of the development of Christianity in Western civilization from the post-New Testament period to the present, stressing institutional growth and changes, theological currents, and interaction of Christianity with culture.

REL 308 Religions of the Ancient World 3(3,0) Selected religious movements in ancient Mesopotamia, Egypt, Canaan, and the Greco-Roman world with emphasis on movements outside the Judeo-Christian tradition.

REL 310 Religion in the United States 3(3,0) Development of religion in the U.S. from the Colonial period to the 20th century. Attention is devoted to analyzing broad currents in religious movements and religious thought which have given shape to the American pluralistic experience.

REL 311 African American Religion 3(3,0) Study of the religious milieu in the U.S. rooted in our African heritage. Background on African tribal religion is included, along with Christian denominations and new religions such as Nation of Islam, Rastafarianism, Voudun, Santeria, and Candomble.

REL 314 Buddhism in China 3(3,0) Study of Buddhism in Chinese history since the second century. Examination of the translation and interpretation of the texts, major Chinese Buddhist schools, monastic life, and the comprehensive influence of Buddhism on Chinese culture and society. All readings and discussions are in English.

REL 330 Contemporary Issues in Religion 3(3,0) Examination of a variety of issues of broad concern to scholars of religion today. Issues may vary. May be repeated for a maximum of six credits with departmental consent.

REL (PHIL) 393 Science and Religion 3(3,0) Exploration and analysis of the conceptual and historical relationship between science and religion. Examination and evaluation of the theoretical claims of science and the metaphysical claims of religion.

REL 401, 601 Studies in Biblical Literature and Religion 3(3,0) Critical examination of a selected topic in biblical studies. Topics vary from year to year. May be repeated once for credit. *Preq:* Consent of instructor.

REL 402, 602 Studies in Religion 3(3,0) Thorough examination of a selected topic in one or more of the religious traditions of the world or of religious life in a particular region. Topics vary from year to year. May be repeated once for credit. *Preq:* Consent of instructor.

REL 404, 604 History of Early Christianity 3(3,0) Study of the history, social and doctrinal, of early Christianity up to 600 A.D. *Preq:* Consent of instructor.

REL 435, 635 Religious Institutions in Community Life 3(3,0) Explores the particular significance of religious organizations as core institutions in American communities and examines their involvement with community political and social structures.

REL H497 Religion Honors Research 3(3,0) Students conduct research, clearly define the topic, and complete an annotated bibliography under the supervision of thesis advisor. *Preq:* Consent of department chair and thesis advisor.

REL H498 Religion Honors Thesis 3(3,0) In consultation with thesis advisor and departmental thesis committee, students write, revise, defend, and complete their theses. *Preq:* REL H497 and consent of department chair and thesis advisor.

REL 499 Independent Study 1-3(1-3,0) Study of selected problems, issues, or movements in religion under the direction of a faculty member chosen by the student. Student and faculty member develop an individualized course of study approved by the department chair prior to registration. May be repeated for a maximum of six credits. *Preq:* Consent of instructor.

RURAL SOCIOLOGY

Professor: C. M. Sieverdes

R S 301 Rural Sociology 3(3,0) Study of human social relationships as influenced by life in the open country and in small towns and villages including considerations of the rural population, rural social institutions, processes of change in agricultural technology, and community area planning and development. Offered spring semester only.

R S (SOC) 303 Methods of Social Research I 4(3,3) See SOC 303.

R S (SOC) 371 Population and Society 3(3,0) See SOC 371.

R S (SOC) 401, 601 Human Ecology 3(3,0) Analysis of the interrelationships between the physical world, modifications in natural environments, human settlement patterns, and institutions that both encourage and regulate environmental modification. Emphasis is placed on conditions whereby natural resources become public policy concerns. Offered spring semester only. *Preq:* Sophomore standing.

R S (SOC) 459, 659 The Community 3(3,0) Close analysis of the development of contemporary communities and their place in society. Continuing effects of industrialization, migration, and technological change on community location and structure are examined. Structural relations of social class, status, and the associations among institutions are explored.

R S (SOC) 471, H471, 671 Demography 3(3,0) See SOC 471.

R S (SOC) 495 Field Experience 3(1,8) See SOC 495.

R S (SOC) 498 Independent Study 3(1,6) See SOC 498.

RUSSIAN

Assistant Professor: G. L. Love; *Lecturer:* J. Bridgwood

RUSS 101 Elementary Russian 4(3,1) Training in pronunciation, grammatical forms, and syntax with a view to giving the student the fundamentals necessary to hold simple conversations and to read simple Russian texts.

RUSS 102 Elementary Russian 4(3,1) Continuation of RUSS 101. *Preq:* RUSS 101.

RUSS 201, H201 Intermediate Russian 3(3,1) Brief review of RUSS 101 and 102 with conversation, composition, and dictation, and the beginning of more serious reading of Russian prose in short stories and plays. *Preq:* RUSS 102.

RUSS 202, H202 Intermediate Russian 3(3,1) Conversation, composition, and dictation based on readings of more difficult Russian prose than in the earlier courses. *Preq:* RUSS 201.

RUSS 305 Russian Conversation and Composition 3(3,0) Practice in spoken Russian emphasizing vocabulary building, pronunciation, and comprehension. Written exercises promote accuracy. *Preq:* RUSS 202 or consent of department chair.

RUSS 307 Russian Civilization 3(3,0) Introduction to significant elements of Russian civilization. Emphasis is on social, geographical, political, and artistic aspects of modern Russia. Taught in Russian. *Preq:* RUSS 202 or consent of department chair.

RUSS 340 Russian Culture of the Nineteenth Century 3(3,0) Study of achievements in art, science, music, and literature in Russia during the nineteenth century. Taught in English.

RUSS 360 Russian Literature to 1910 3(3,0) Study of key texts in the modern literary tradition in Imperial Russia from Pushkin to Chekhov. Readings and lectures are in English.

RUSS 361 Russian Literature Since 1910 3(3,0) Study of key texts in modern Russian and Soviet literature with particular focus on Russian modernist movements and Socialist Realism. Readings and lectures are in English.

RUSS 398 Directed Reading 1-3(1-3,0) Directed study of selected works in Russian. May be repeated for a total of six credits. *Preq:* RUSS 202 or equivalent and consent of department chair.

RUSS 460 Tolstoy and Dostoevsky 3(3,0) Examines a selection of major works by Leo Tolstoy and Fyodor Dostoevsky with particular focus on their literary, political, and philosophical aspects as well as their importance within the modern European literary tradition. Readings and lectures are in English. *Preq:* Junior standing or consent of instructor.

SCIENCE AND TECHNOLOGY IN SOCIETY

S T S 101 Survey of Science and Technology in Society 3(3,0) Surveys historical, philosophical, and social studies of science; introduces the basic requisites for scientific and technological literacy; and considers the problems of responsible participation in a scientifically and technologically advanced society.

S T S 102 Ideas, Machinery, and Society 3(3,0) Interdisciplinary discussion course introducing the fundamental themes of STS: the influence of social groups on the development of science and technology and the effects of science and technology on society.

S T S 171 Scientific Skepticism 3(3,0) Investigation of unusual phenomena using scientific methodology. Explores the interplay of science, pseudoscience, and society through development of critical thinking skills. Discussion-oriented course that focuses on case studies of extraordinary claims.

S T S 216 Critical Analysis of a Current STS Issue 3(3,0) Critical analysis of a current science and technology issue with significant controversial and societal consequences (e.g., global warming, methods of energy production). Students retrieve, analyze, evaluate, present, and discuss relevant information to develop basic competence in science and mathematics and in the evaluation of scientific and technological issues. May be repeated for a maximum of six credits, but only if different topics are covered. *Preq:* Sophomore standing.

S T S 499 Independent Study 3(3,0) Study of selected topics under direction of a faculty member selected by the student. Student and faculty member develop a course of study designed for the individual student and approved by the S T S program coordinator prior to registration. May be repeated for a maximum of six credits. *Preq:* Science and Technology General Education requirement, consent of instructor.

SECONDARY EDUCATION

Professors: B. E. Bailey, W. H. Leonard; *Associate Professor:* R. M. Horton; *Assistant Professors:* C. O. Lane, L. F. Medford, S. J. Pass, E. M. Wiegert

EDSEC 412 Directed Student Teaching in Secondary School Subjects 12(1,33) Program of supervised observation and teaching in cooperation with selected public schools. Opportunities are provided for prospective teachers to obtain experiences in the subject area. Students are sectioned according to teaching fields: English, history, social science, mathematical sciences, modern languages, science. Enrollment is limited.

EDSEC 417 Teaching Internship in the Secondary School 6(1,15) Full-time, supervised teaching internship for one semester in cooperation with a participating South Carolina secondary school. Reserved for students seeking certification in critical-need teaching areas. May be repeated for a maximum of 12 credits. To be taken Pass/Fail only. *Preq:* ED F 301, 302, 335, READ 498, and one of the following: EDSEC 424, 425, 426, 427. Application approved by the School of Education.

EDSEC 424, H424 Teaching Secondary English 3(2,2) Development of instructional practices and materials appropriate for secondary English; familiarization with curriculum materials; includes field experiences in local schools in preparation for student teaching. Taught fall semester only. *Preq:* Second semester Junior standing, admission to the professional level, ED 105, ED F 301, 302, 335, at least 18 hours of English coursework, concurrent enrollment in READ 498, minimum grade-point ratio of 2.5.

EDSEC 425 Teaching Secondary Modern Languages 3(2,2) Development of instructional practices and materials appropriate for secondary modern languages; familiarization with curriculum materials; includes field experiences in local schools. Taught fall semester only. *Preq:* Second semester Junior standing, admission to the professional level, ED 105, ED F 301, 302, 335, 18 hours of modern language coursework, concurrent enrollment in READ 498, minimum grade-point ratio of 2.5.

EDSEC 426, H426 Teaching Secondary Mathematics 3(2,2) Development of instructional practices appropriate for secondary mathematics; familiarization with curriculum materials, planning, and implementation of lessons; includes field experiences in local schools. Taught fall semester only. *Preq:* Admission to the professional level, ED 105, ED F 301, 302, 335, at least 18 hours of mathematics coursework, concurrent enrollment in READ 498, minimum grade-point ratio of 2.5.

EDSEC 427, H427 Teaching Secondary Science 3(2,2) Development of instructional practices and materials for teaching secondary school science (biological, earth, and physical sciences); familiarization with secondary science curriculum materials; includes field experiences in local schools. Taught fall semester only. *Preq:* Second semester Junior standing, admission to the professional level, ED 105, ED F 301, 302, 335, at least 18 hours of science coursework, concurrent enrollment in READ 498, minimum grade-point ratio of 2.5.

EDSEC 428, H428 Teaching Secondary Social Studies 3(2,2) Development of instructional practices and materials appropriate for secondary social studies; familiarization with curriculum materials; includes field experiences in local schools in preparation for student teaching. Taught fall semester only. *Preq:* Second semester Junior standing, admission to the professional level, ED 105, ED F 301, 302, 335, at least 18 credits of social studies coursework, passing score on South Carolina social studies content knowledge exam, concurrent enrollment in READ 498.

EDSEC 437, 637 Technology in Secondary Mathematics 3(3,0) Students learn how to integrate calculators, data collectors, and computers in the secondary mathematics curriculum. They solve problems from middle school, Algebra I, Geometry, and Algebra II courses. *Preq:* Second semester Junior standing, admission to the professional level.

EDSEC 444 Teaching Internship in Secondary English 9(0,27) Interns design, implement, and critically reflect upon instructional units and teaching practices in supervised secondary English classes. Interns must provide evidence of performance that meets national and state teaching standards for secondary English. Taught spring semester only. *Preq:* EDSEC 424. *Coreq:* EDSEC 454.

EDSEC 446 Teaching Internship in Secondary Mathematics 9(0,27) Prospective secondary mathematics teachers apply teaching and learning theories in a field-based setting through an internship in a secondary public school classroom. Taught spring semester only. *Preq:* EDSEC 426. *Coreq:* EDSEC 456.

EDSEC 447 Teaching Internship in Secondary Science 9(0,27) Supervised teaching internship in an assigned secondary public school science classroom. Meets part of requirement for South Carolina science teaching certification. Taught spring semester only. *Preq:* EDSEC 427. *Coreq:* EDSEC 457.

EDSEC 448 Teaching Internship in Secondary Social Studies 9(0,27) Supervised observation and teaching in cooperation with a mentor teacher in a secondary public school. Students design, implement, and critically reflect upon curricular and instructional practices in public secondary social studies classrooms. Taught spring semester only. *Preq:* EDSEC 428. *Coreq:* EDSEC 458.

EDSEC 454 Secondary English Capstone Seminar 3(2,3) Seminar in conjunction with EDSEC 444. Interns reflect upon and solve problems regarding teaching events, share effective teaching practices, and devise ways to document dimensions of effective teaching. Taught spring semester only. *Preq:* EDSEC 424. *Coreq:* EDSEC 444.

EDSEC 456 Secondary Mathematics Capstone Seminar 3(2,3) Capstone seminar accompanying supervised secondary mathematics teaching internship. Satisfies part of the requirements for South Carolina secondary certification. Taught spring semester only. *Preq:* EDSEC 426. *Coreq:* EDSEC 446.

EDSEC 457 Secondary Science Capstone Seminar 3(2,3) Capstone seminar accompanying supervised high school science teaching internship. Satisfies part of requirement for South Carolina secondary science certification. Offered spring semester only. *Preq:* EDSEC 427. *Coreq:* EDSEC 447.

EDSEC 458 Secondary Social Studies Capstone Seminar 3(2,3) Capstone seminar accompanying supervised high school social studies teaching internship. Satisfies part of requirement for South Carolina secondary certification. Offered spring semester only. *Preq:* EDSEC 428. *Coreq:* EDSEC 448.

SOCIOLOGY

Professors: J. M. Coggeshall, D. K. Sturkie, *Chair*; B. J. Vander Mey, D. A. Ward, W. M. Wentworth, J. C. Witte; *Associate Professors:* M. T. Britz, F. C. Mobley, L. G. Peppers; *Assistant Professor:* E. M. Granberg; *Visiting Assistant Professor:* W. H. Haller

SOC 201, H201 Introduction to Sociology 3(3,0) Sociological perspective: the study of contemporary groups, organizations, and societies in terms of human social behavior, social change, social structure, and social institutions.

SOC 202 Social Problems 3(3,0) Social problems involving the family, education, health care, political and legal systems, economy, population, environment, community; and special problems associated with age, economics, racial status, and gender inequality.

- SOC (C R D) 235 Introduction to Leadership 3(3,0)** Introduction to leadership in various organizational settings from a sociological perspective. Examines the concept of leadership, leadership traits, types of leadership, and the evolution of leadership behaviors in the 19th and 20th centuries.
- SOC (R S) 303, H303 Methods of Social Research I 4(3,3)** Introduction to methods of social research: research design, sampling, measurement, reliability, and validity; the relationship between theory and research. Coordinating laboratory introduces students to computer literacy through research. Required of all Sociology majors. *Preq:* CP SC 120, MTHSC 203 or 301 or EX ST 301, SOC 201.
- SOC 310, H310 Marriage and Intimacy 3(3,0)** Examination of mate selection, living together, marital relations, family planning, conflict resolution, divorce and remarriage, later life adjustments, and singlehood as a lifestyle in the United States. *Preq:* SOC 201 or consent of instructor.
- SOC 311 The Family 3(3,0)** Introduction to the family as a social institution. Primary focus is on families in the U.S. with comparisons to other cultures. Topics include history of the family, trends in family formation and dissolution, division of labor, intergenerational relationships, family violence, and policy. Analyses of race, class, and gender are incorporated. *Preq:* SOC 201 or consent of instructor.
- SOC 330 Work and Careers in Society 3(3,0)** Introduces changes in the structure of work from preindustrial to postindustrial periods. Topics include the effects of stratification on career decisions, career paths and implications for life changes, social effects of scientific management of work, unionization, globalization, the rise of multinational corporations, and cross-cultural comparisons of management styles. *Preq:* SOC 201 or consent of instructor.
- SOC 331 Urban Sociology 3(3,0)** Urbanization as a social process and related conditions of work, family structure, social mobility, crime, lifestyle, technology, and development of urban areas in the Third World. *Preq:* SOC 201.
- SOC 350 Self and Society 3(3,0)** Social psychology from the sociological viewpoint. Examination of the interactional and group influences on such individual conditions as childhood and life-course development, language, emotions, motives, sexuality, deviance, and self-concept. *Preq:* SOC 201.
- SOC 351 Collective Behavior 3(3,0)** Spontaneous, transitory, and sporadic group behavior: crowds, panics, riots, fads, and social movements. *Preq:* SOC 201.
- SOC (E L E, PO SC, PSYCH) 356 Social Science of Entrepreneurship 3(3,0)** Examines those areas of the social sciences that have direct relevance for entrepreneurs. Topics include processes by which entrepreneurs are shaped by social institutions such as the family and community, public policy implications and influences on entrepreneurship, risk perception, decision making, motivation, leadership, and group dynamics. *Preq:* SOC 201 or (C R D) 235 or PSYCH 201 or PO SC 101 or 102 or 104 or consent of instructor.
- SOC (R S) 371 Population and Society 3(3,0)** Social, economic, and political consequences of population structure and change, including problems of food and resources, as well as population goals and policies in developing countries and the United States. *Preq:* SOC 201.
- SOC 380 Introduction to Social Services 3(3,0)** Fundamentals of casework practice, including philosophy and values, models of group work, and ethics in social services work. *Preq:* SOC 201.
- SOC 390 The Criminal Justice System 3(3,0)** Social systems analysis of criminal justice agencies. Primary focus is on law enforcement and corrections and their interagency relationship with courts and prosecution. *Preq:* SOC 201.
- SOC 391 Sociology of Deviance 3(3,0)** Study of patterns of deviant behavior: subcultures, careers, and life-styles of deviants; deviance theory and research. *Preq:* SOC 201.
- SOC 392 Juvenile Delinquency 3(3,0)** Study of nature, extent, and causes of juvenile delinquency; societal attempts to control delinquent conduct and gang violence; emergence of the juvenile justice system. *Preq:* SOC 201.
- SOC 393 Criminology 3(3,0)** Study of nature and causes of criminal behavior; societal attempts to control crime; social responses to crime, criminals, and the criminal justice system. *Preq:* SOC 201.
- SOC 394, H394 Sociology of Mental Illness 3(3,0)** Mental illness as a social phenomenon, including cultural and social influence, organizational settings of mental health-care delivery, legal issues, patient-therapist relationships, and mental illness intervention as social control. *Preq:* SOC 201.
- SOC 396 Alcoholism: Social Causes, Consequences and Treatment 3(3,0)** Issues involved in alcoholism and alcohol abuse, assessment of sociological and social-psychological theories of alcoholism and prevention; societal problems associated with the misuse of alcohol. *Preq:* SOC 201 or consent of instructor.
- SOC 397 Drug Abuse: Social Causes, Consequences and Treatment 3(3,0)** Issues involved in drug abuse other than alcohol; assessment of sociological and social-psychological theories of drug use, abuse, and treatment; societal problems associated with the misuse of drugs other than alcohol. *Preq:* SOC 201 or consent of instructor.
- SOC (R S) 401, 601 Human Ecology 3(3,0)** See R S 401.
- SOC 404, 604 Sociological Theory 3(3,0)** Survey of the development of sociological theory. Required of all Sociology majors. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC H408 Honors Thesis Research I 3** Reading and research related to senior honors thesis. Completion of junior honors requirements and approval of department chair and thesis advisor required. *Preq:* SOC H303, H310, honors status.
- SOC H409 Honors Thesis Research II 3** Research and writing related to the senior honors thesis. *Preq:* SOC H408, honors status.
- SOC 414, 614 Policy and Social Change 3(3,0)** Uses the sociological perspective to examine policy development, implementation, and evaluation in the public and private sectors. Specifically, focuses on values and ethics and effects of social change efforts on the outcomes of policy formation, social planning, and implementation. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 430 Sociology of Organizations 3(3,0)** Analysis of administrative organizations and voluntary associations; applied analysis of their formal and informal group relations, communications, and effectiveness. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 432 Sociology of Religion 3(3,0)** Sociological analysis of religious systems and movements and their influence on other social institutions. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 433, 633 Globalization and Social Change 3(3,0)** Examination of the social and historical causes of development and underdevelopment. Various sociological theories of development are reviewed. Selected countries are examined in an international context. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 435, 635 Leadership and Team Building 3(2,3)** Introduction to the area of leadership and the process of building effective teams. Examines various sociological perspectives on leadership and their role in developing and maintaining various types of groups. Students are actively involved in the educational process through participation in experiential learning opportunities. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 440, 640 Leisure, the Mass Media, and Culture 3(3,0)** Production and consumption of leisure activities in contemporary society; popular culture and the mass media as dominant leisure forms; social effects of leisure activities; relationship between work and leisure. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 441, 641 Sociology of Sport 3(3,0)** Investigation of sport as a social phenomenon. Emphasizes leadership, discrimination, socialization, communication, conflict, and cooperation in sports. Also considers emerging social issues in contemporary sports. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC (R S) 459, 659 The Community 3(3,0)** See R S 459.
- SOC 460, 660 Race, Ethnicity, and Class 3(3,0)** Investigation of sociological perspectives on race, ethnic relations, and social stratification. Includes of analysis of the impact of social class on minority movements. Not open to students who have taken SOC 431. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 461 Sex Roles 3(3,0)** Female and male socialization; changes in statuses, roles, inequality, and opportunities in contemporary society, with cross-cultural and social class comparisons. *Preq:* SOC 201 and Junior standing or consent of instructor.

- SOC 462 Men, Masculinity, and Society 3(3,0)** Consideration of masculinity and social order: norms, roles, relationships, and activities; identity and socialization: work, family, sexuality, war, sports, including subcultural comparisons. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 463, 663 Sociology of Parenting 3(3,0)** Study of sociology of parenting, child rearing, parenting styles and outcomes; social change and parenting; variations by sex, race, and class. Includes cross-cultural comparisons. Course is research-based with an applied orientation. *Preq:* SOC 201, Junior standing.
- SOC (R S) 471, H471, 671 Demography 3(3,0)** Study of demographic concepts, theory, and research methods for vital statistics, migration, and population distribution and projections. Considers collection and processing of demographic data and organization of demographic data systems. Offered fall semester only. *Preq:* ANTH 201 or SOC 201 or R S 301.
- SOC 480, 680 Medical Sociology 3(3,0)** Sociocultural factors in the etiology and treatment of physical illness; medical occupations and professions; the organization of health care delivery systems. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 481, 681 Aging and Death 3(3,0)** Sociological orientation to aging populations focusing on the impact of health care, welfare, and retirement systems. Includes dying as a social phenomenon, suicide, euthanasia, and funerals. *Preq:* SOC 201 and Junior standing or consent of instructor.
- SOC 484, 684 Child Abuse and Treatment 3(3,0)** Comprehensive examination of child abuse, neglect, and exploitation as major social problems; causes, effects, and prevalence of physical, sexual, and emotional maltreatment; definitional controversies; social policy and legal considerations; therapeutic approaches for children and their caretakers; child maltreatment and the judicial system. *Preq:* SOC 201 and Senior standing or consent of instructor.
- SOC 491 The Sociology of Policing 3(3,0)** Introduction to the major issues of contemporary policing in the U. S. from a sociological perspective. Topics include the changing functions and structure of policing, the police subculture, and the role of the police in a liberal democracy. *Preq:* SOC 390 or consent of instructor.
- SOC 493, 693 Sociology of Corrections 3(3,0)** Analysis of correctional alternatives. Topics include sentencing strategies and their impact, prison populations (male, female, and juvenile), inmate social structures, treatment and custody issues, community-based alternatives (probation, parole, electronic monitoring, and work release), and correctional management issues. *Preq:* SOC 390 or consent of instructor.
- SOC 494, 694 Sociology of Organized Crimes 3(3,0)** Examines the multifarious aspects of criminal organizations, namely their structure, methods, and networks. Specific topics may include white-collar crime and traditional, non-traditional, and transnational organized crime. *Preq:* SOC 201 or consent of instructor.
- SOC (R S) 495 Field Experience 3(1,8)** Students participate in selected field placements under supervision for eight hours weekly and in a one-hour seminar per week. May be repeated once for credit. *Preq:* SOC 380 or 390 and consent of department chair.
- SOC (R S) 498 Independent Study 3(1,6)** Individual readings or projects in sociological areas not covered in other courses. A written proposal must be approved by the instructor directing the work and by the department chair prior to registration. May be repeated for a maximum of six credits. *Preq:* Consent of department chair.
- SOC 499 Seminar in Selected Topics in Contemporary Sociology 3(3,0)** Sociological areas of current interest are explored. May be repeated by special arrangement for a maximum of six credits. *Preq:* Consent of department chair.

SPANISH

Professors: C. R. Adams, G. Bautista, P. R. Heusinkveld, S. C. King, M. A. Morris; *Associate Professor:* J. K. Hurley; *Assistant Professors:* M. M. Rojas-Massei, D. J. Smith, G. E. Tissera; *Lecturers:* A. B. Fernandez, X. Gonzales-Parada, S. K. Harris, L. M. Hernandez, B. T. Milliman, S. D. Perez, C. A. Robison, M. T. Roldan-Garcia, R. Schemainda, R. K. Simpson, M. E. Smallwood, R. G. Unda, S. Vilar-Gonzalez

SPAN 101 Elementary Spanish 4(3,1) Course for students with no previous experience in Spanish study. The fundamentals of grammar and vocabulary are taught, and a foundation is provided for building oral and written proficiency. Three hours a week of classroom instruction and one hour a week in the language laboratory.

SPAN 102 Elementary Spanish 4(3,1) Continuation of SPAN 101.

SPAN 104 Basic Spanish 4(3,1) Condensed first-year course for students who have previously studied Spanish. Upon completion, students are prepared to enter Intermediate Spanish.

SPAN 121 Accelerated Spanish I 8(6,2) Accelerated course for students with two or more years of Spanish in high school. May be taken in lieu of SPAN 101 and 102. Through fundamental grammar, conversation, composition, and dictation, proficiency is stressed. May not be taken by students who have completed SPAN 101 or 102.

SPAN 151 Spanish for Graduate Students 3(3,0) Intensive program only for graduate students preparing for the reading examination in Spanish. A minimum grade of B on a final examination will satisfy graduate school foreign language requirement. May be repeated once. To be taken Pass/Fail only. *Preq:* Graduate standing.

SPAN 201, H201 Intermediate Spanish 3(3,1) Intermediate course to practice listening, speaking, reading, and writing. Grammatical structures and basic vocabulary are reviewed systematically. Includes literary and cultural perspectives. *Preq:* SPAN 102, 121, or consent of department chair.

SPAN 202, H202 Intermediate Spanish 3(3,1) Continuation of SPAN 201. *Preq:* SPAN 201.

SPAN 221 Accelerated Spanish II 6(6,0) Accelerated intermediate course that may be taken in lieu of SPAN 201 and 202. Through conversation, composition, dictation, and intensive grammar review, proficiency is stressed. Includes literary readings and cultural perspectives. May not be taken by students who have completed SPAN 201 or 202. *Preq:* SPAN 102, 121, or consent of department chair.

SPAN 300 Spanish Composition for Business 3(3,0) Intensive practice of business writing skills through compositions, general review of grammatical structures, and exposure to business vocabulary and concepts. *Preq:* SPAN 202 or consent of department chair.

SPAN 302 Intermediate Spanish Grammar and Composition 3(3,0) Intensive review of Spanish structure, verbs, idioms, and vocabulary with an introduction to syntax and stylistics through controlled and free composition. *Preq:* SPAN 202 or consent of department chair.

SPAN 303 Survey of Spanish Literature I 3(3,0) Literary movements, influences, and authors from the beginning to the end of the 17th century; representative works, discussions. *Preq:* SPAN 202 or consent of department chair.

SPAN 304 Introduction to Hispanic Literary Forms 3(3,0) Introduction to the basic structures and elements of fiction, poetry, drama, and essay, including literary and critical theory, with readings in 19th- and 20th-century Spanish and Spanish-American literature. *Preq:* SPAN 302 or 305.

SPAN 305 Intermediate Spanish Conversation and Composition I 3(3,0) Practice in spoken Spanish with emphasis on vocabulary, pronunciation, intonation, and comprehension. Includes written work to increase accuracy and assignments in the language laboratory. *Preq:* SPAN 202 or consent of department chair.

SPAN 307 The Hispanic World: Spain 3(3,0) Introduction to the significant aspects of the culture of Spain from its origins to the present. Emphasizes the artistic, social, historical, political, and contemporary issues of the Iberian Peninsula. *Preq:* SPAN 202 or consent of department chair.

SPAN 308 The Hispanic World: Latin America 3(3,0) Introduction to the significant aspects of the culture of Spanish-American countries. Emphasis is placed on the development of the political, economical, geographical, social, and artistic aspects of Spanish America from the indigenous period to the present. *Preq:* SPAN 202 or consent of department chair.

SPAN 309 Introduction to Spanish Phonetics 3(3,0) Study of basic concepts of phonetics and phonology, fundamental principles of Spanish pronunciation and International Phonetic Alphabet. *Preq:* SPAN 202 or consent of department chair.

SPAN 310 CLIP Summer Immersion Program 6(6,0) Conducted entirely in Spanish for eight hours daily. Consists of activities that combine interrelating cultural topics with language skill practice. Frequent opportunities to converse with native speakers during meals and on excursions. Students receive six credits, three of which may be taken in lieu of SPAN 202. *Preq:* SPAN 201.

- SPAN 311 Survey of Spanish-American Literature 3(3,0)** Literary movements, influences, authors, and works from the Colonial period to the present. *Preq:* SPAN 202 or consent of department chair.
- SPAN 314 Hispanic Linguistics 3(3,0)** Familiarizes students with the theory and practice of linguistics applied to Spanish, in order to deepen their knowledge of phonetics, morphology, syntax, semantics and linguistic change. *Preq:* SPAN 302 or consent of department chair.
- SPAN 316 Spanish for International Trade I 3(3,0)** Introduction to commercial Spanish; study of the spoken and written language, protocol, and cultural environment of the Spanish-speaking business world. Business vocabulary, basic business and cultural concepts, and situational practice. Grammatical review through business letters, professional documents and commercial reports. Reading and analysis of commercial texts. *Preq:* Any 300-level Spanish language or literature class.
- SPAN 318 Spanish Through Culture 3(3,0)** Topic-generated conversation course in Spanish through a broad array of artistic manifestations in the Hispanic World emphasizing conversation and short written exercises. Focuses on one Hispanic culture topic which provides a basis for class discussion and short written compositions in Spanish. *Preq:* SPAN 202 or consent of department chair.
- SPAN (PO SC) 382 Spanish-Language News 1(1,0)** See PO SC 382.
- SPAN H391 Honors Introduction to Hispanic Literary Forms 1(1,0)** One-hour independent study to allow honors students to pursue supervised research on some aspect of Hispanic literature. *Coreq:* SPAN 301, membership in Calhoun Honors College.
- SPAN H392 Survey of Spanish Literature 1(1,0)** Independent study allowing honors students to pursue supervised research on witchcraft in 15th- and 16th-century Spain. *Coreq:* SPAN 303, membership in Calhoun Honors College.
- SPAN H393 The Hispanic World: Latin America 1(1,0)** One-hour independent study to allow honors students to pursue supervised research on a topic related to Hispanic American history, politics, geography, economics, social institutions, or artistic movements. *Coreq:* SPAN 308, membership in Calhoun Honors College.
- SPAN 398 Directed Reading 1-3(1-3,0)** Directed study of selected topics in Spanish literature, language, and culture. May be repeated for a maximum of six credits. *Preq:* Consent of department chair.
- SPAN 401 New Spanish Fiction 3(3,0)** Study of selected readings by popular emerging and established authors of Spain, with emphasis on current cultural trends. Readings include, but are not limited to, detective novels, regional fiction, and fiction from marginalized groups in Spain. *Preq:* SPAN 300-level literature course or consent of department chair.
- SPAN 403 Spanish American Women Writers 3(3,0)** In-depth study of selected literary works by Spanish American women. Representative authors are studied within their philosophical and sociopolitical contexts. *Preq:* Spanish 300-level literature course or consent of department chair.
- SPAN 404 Nineteenth and Twentieth Century Spanish Literature 3(3,0)** Selected readings from major authors in Spain. Emphasis is on readings in poetry, theatre, short story, and novels from the 19th to the early 20th century. *Preq:* Spanish 300-level literature course or consent of department chair.
- SPAN 405 International Trade and Literature 3(3,0)** Readings in the social, economic, and political changes of the Hispanic world in fiction and nonfiction. Study of the importance of social changes that have shaped the economies of Hispanic countries. *Preq:* Spanish 300-level literature or culture course or consent of department chair.
- SPAN 406 Hispanic Narrative Fiction 3(3,0)** Topic-generated readings from Spanish America and/or Spain. Readings consider gender issues, the family, ethnicity, religion, politics, history, or socioeconomic issues in the Hispanic world. *Preq:* Spanish 300-level literature or culture course or consent of department chair.
- SPAN 407 Hispanic Film 3(3,0)** Films are “read” as texts that mirror Hispanic society. Beside learning about cinematographic techniques in Spanish, topics include comparative analysis of film and literature, film as propaganda, film as “blockbuster,” and the cinematic depiction of social, cultural, and historical realities of Hispanic nations. *Preq:* Spanish 300-level language, literature, or culture course or consent of department chair.
- SPAN 409 Comprehensive Writing in Spanish 3(3,0)** Study of stylistics in addition to grammar review; writing paragraphs, short compositions, and creative papers in Spanish on both fiction and non-fiction topics. *Preq:* Any 300-level Spanish course or consent of department chair.
- SPAN 411 Advanced Spanish Conversation and Composition 3(3,0)** Continuation of SPAN 305 with emphasis on greater fluency and sophistication in oral and written expression. *Preq:* SPAN 305 or consent of department chair.
- SPAN 415 Spanish for Health Professionals 3(3,0)** Medical concepts and terminology in Spanish; designed for students who plan to work in professions related to public health care. *Preq:* Six credits in Spanish at the 300–400 level.
- SPAN 416 Spanish for International Trade II 3(3,0)** Study of more complex business vocabulary, cultural concepts, and environment of Hispanic markets. Social, political, and economic issues related to Spanish-speaking countries and their current economies in global marketing. Economic geography of Hispanic countries, company organization, management, banking, investment, goods and services, and marketing. *Preq:* SPAN 316.
- SPAN 417 Professional Communication 3(3,0)** Skill-oriented course, taught in a seminar format. Students learn established “protocol” for addressing various Spanish-speaking audiences and learn to give professional presentations in Spanish. *Preq:* Spanish 300-level course or consent of department chair.
- SPAN 418 Technical Spanish for Health Management Professionals 3(3,0)** Technical health communication course in Spanish with emphasis on managerial and business aspects of the international health industry. *Preq:* SPAN 415 and six additional credits in Spanish at the 300–400 level.
- SPAN 419 Health and the Hispanic Community 3(3,0)** Study of cultural aspects of health and health services in Hispanic populations. Taught in Spanish. *Preq:* SPAN 415 and six additional credits in Spanish at the 300–400 level.
- SPAN 420 Hispanic Drama 3(3,0)** Exploration of contemporary Hispanic theatre. The production and reception of the plays are analyzed paying particular attention to notions of dramatic genre. Focuses on the change and continuity of the plays as well as their historical, cultural, and ideological backgrounds. *Preq:* Two 300-level Spanish literature or culture classes.
- SPAN 421 Spanish-American Modernism and Postmodernism 3(3,0)** In-depth study of Spanish-American modernism and postmodernism with focus on narrative and poetry. *Preq:* Any 300-level Spanish literature course or consent of department chair.
- SPAN 422 The Contemporary Spanish-American Novel 3(3,0)** New trends in the development of the Spanish-American novel from the 1940s to the present. *Preq:* Spanish 300-level literature course or consent of department chair.
- SPAN 435 Contemporary Hispanic Culture 3(3,0)** Study of social, political, economic, and artistic manifestations of contemporary Hispanic culture. *Preq:* Spanish 300-level civilization or culture course or consent of department chair.
- SPAN H438 Spanish Honors Research 3(3,0)** Individual honors research conducted under the direction of Language Department faculty. May not be used to satisfy requirements for the major in Modern Languages–Spanish or Language and International Trade or the minor in Modern Languages. *Preq:* Junior standing, membership in Calhoun Honors College.
- SPAN H439 Spanish Honors Thesis 3(3,0)** Individual honors research conducted and thesis completed under the direction of Language Department faculty. May not be used to satisfy requirements for the major in Modern Languages–Spanish or Language and International Trade or the minor in Modern Languages. *Preq:* Junior standing, SPAN H438, membership in Calhoun Honors College.
- SPAN H491 Hispanic Narrative Fiction 1(1,0)** One-hour independent study to allow honors students to pursue supervised research on the socio-political climate under Franco’s dictatorship, with emphasis on contemporary literary theory. *Coreq:* SPAN 406, membership in Calhoun Honors College.
- SPAN H492 Contemporary Latin American Novel 1(1,0)** One-hour independent study to allow honors students to pursue supervised research in the literary and cinematographic images of magic realism. *Coreq:* SPAN 422, membership in Calhoun Honors College.

SPAN 498 Independent Study 1-3(1-3,0-3) Directed study of selected topics in Spanish language, literature, and culture. May be repeated for a maximum of six credits. *Preq:* Consent of department chair.

SPAN 499, 699 Special Topics 3(3,0) Study of timely or special topics in Spanish. May be repeated for a maximum of six credits, but only if different topics are covered. *Preq:* Consent of department chair.

SPECIAL EDUCATION

Professor: A. Katsiyannis; *Associate Professors:* M. J. Hodge, P. M. Stecker; *Assistant Professors:* P. J. Riccomini, J. B. Ryan; *Lecturer:* R. E. Fish

ED SP 370, H370 Introduction to Special Education 3(3,0) Survey of students with disabilities and with gifts/talents. Individuals with Disabilities Education Act is emphasized, including general educator's role in serving students with special needs. Characteristics, assessment, and effective instructional procedures for students of varying exceptionalities are addressed. *Preq:* Minimum grade-point ratio of 2.0.

ED SP 371 Characteristics of the Mildly Handicapped 3(3,0) Surveys the characteristics which distinguish the mildly/moderately handicapped from the more severely handicapped. *Preq:* Minimum 2.0 grade-point ratio.

ED SP 372 Characteristics and Identification of and Strategies for Individuals with Learning Disabilities 3(3,0) In-depth coverage of characteristics and identification procedures for individuals with learning disabilities. Effective instructional strategies are addressed. Students participate in field experience throughout the semester. Offered fall semester only. *Preq:* ED SP 370; admission to professional level.

ED SP 373 Characteristics and Instruction of Individuals with Mental Retardation 3(3,0) In-depth coverage of characteristics and identification procedures for individuals with mental retardation. Effective instructional strategies are addressed. Students participate in field experiences throughout the semester. *Preq:* ED SP 370; admission to professional level.

ED SP 374 Characteristics and Strategies for Individuals with Emotional/Behavioral Disorders 3(3,0) In-depth coverage of characteristics and identification procedures for individuals with emotional or behavioral disorders. Effective instructional strategies and behavior management are addressed. Students participate in field experiences throughout the semester. *Preq:* ED SP 370; admission to professional level.

ED SP 416 Teaching Internship in Special Education 6(1,15) Full-time, supervised teaching internship in K–12 special education for one semester in cooperation with a participating South Carolina school. Reserved for students seeking certification in critical-need teaching areas. May be repeated for a maximum of 12 credits. To be taken Pass/Fail only. *Preq:* ED SP 371, 491, 493, 494, 496; application approved by department.

ED SP 468 Early Intervention for Infants and Children with Special Needs 3(3,0) Provides students with a working knowledge of the history of early intervention, legal precedence for providing early intervention services, and effective instructional techniques for working with infants and young children with disabilities and their families. *Preq:* ED SP 370.

ED SP 469, 669 Characteristics of Individuals with Emotional and Behavioral Disorders 3(3,0) Addresses the characteristics of individuals with emotional and behavioral disorders. Consideration is given to historical and legal aspects, definitions, comprehensive assessment, and the impact of school, home, culture, and society on individuals with behavior disorders. Research findings in the field of behavior disorders are emphasized. *Preq:* ED SP 370.

ED SP 470, 670 Characteristics of Individuals with Learning Disabilities 3(3,0) Provides specific knowledge of definitions, evaluation procedures, cognitive, social, academic, and functional skills of individuals with learning disabilities across the lifespan. *Preq:* ED SP 370.

ED SP 472, 672 Characteristics of Individuals with Mental Retardation 3(3,0) Characteristics of mental retardation across the lifespan: learning, behavioral, and developmental aspects are examined. *Preq:* ED SP 370.

ED SP 473, 673 Educational Procedures for Individuals with Mental Retardation 3(3,0) Identification, selection, and preparation of functional curriculum materials and pedagogy for teaching students with mental retardation. A multidisciplinary, student-centered approach to program planning provides the framework. *Preq:* ED SP 472.

ED SP 474, 674 Procedures for Individuals with Emotional and Behavioral Disorders 3(3,0) Assists students in developing specific strategies for teaching individuals with emotional and behavioral disorders, utilizing preventive measures, expanding skills in behavior analysis, and implementing the least restrictive intervention warranted. Includes programmatic considerations, social skill instruction, curriculum selection, IEP development, and effective transition. *Preq:* ED SP 469.

ED SP 475, 675 Educational Procedures for Individuals with Learning Disabilities 3(3,0) Provides knowledge of educational evaluation and instructional procedures to improve outcomes for individuals with learning disabilities. *Preq:* ED F 302, ED SP 370, PSYCH 201; or consent of instructor.

ED SP 476, 676 Practicum in Learning Disabilities 3(2,3) Addresses content knowledge, skills, and professional values for successful teaching of students with learning disabilities. Focuses on teacher-directed instruction and the use of critical instructional factors, the use of recommended practices for individuals with learning disabilities, and the measurement and analysis of student performance data. *Preq:* ED SP 470, 475; completion of student teaching.

ED SP 478, 678 Practicum in Emotional and Behavioral Disorders 3(2,3) Addresses content knowledge, performance skills, and professional values for successful teaching of students with emotional and behavioral disorders. Focuses on teacher-directed instruction and the use of critical instructional factors, the use of recommended practice for students with disabilities, and the measurement and analysis of student performance data. *Preq:* ED SP 474; completion of student teaching.

ED SP 479, 679 Practicum in Mental Retardation 3(2,3) Addresses content knowledge, performance skills, and professional values for successful teaching of students with mental retardation. Focuses on teacher-directed instruction and the use of critical instructional factors, the use of recommended practices for students with disabilities, and the measurement and analysis of student performance data. *Preq:* ED SP 473; completion of student teaching.

ED SP 491 Educational Assessment of Individuals with Disabilities 3(2,2) Introduction to assessment process (verification) in special education. Includes procedural safeguards; data collections via informal and standardized procedures; issues in assessment; psychometric properties of standardized tests; and administration, scoring, and interpretation of selected instruments. Offered spring semester only. *Preq:* ED SP 372, 373.

ED SP 492 Mathematics Instruction for Individuals with Mild Disabilities 3(3,0) Prepares students to provide explicit instruction in mathematics for individuals with mild disabilities. Students learn to assess, analyze, and teach math skills systematically. Offered fall semester only. *Preq:* ED SP 374, 491; concurrent enrollment in ED SP 493, 494, 496, 497.

ED SP 493 Classroom and Behavior Management for Special Educators 3(3,0) Students describe various intervention strategies for increasing and maintaining appropriate behaviors and for decreasing or eliminating inappropriate behaviors. Students accurately recognize, record, and chart inappropriate behaviors; employ the least restrictive intervention; foster self-management skills; and develop preventive strategies and class-wide systems for managing academic and social behavior. Offered fall semester only. *Preq:* ED SP 374, 491; concurrent enrollment in ED SP 492, 494, 496, 497.

ED SP 494 Teaching Reading to Students with Mild Disabilities 3(3,0) Emphasizes the knowledge and skills necessary for teaching reading to students with mild disabilities. Offered fall semester only. *Preq:* ED SP 374, 491; concurrent enrollment in ED SP 492, 493, 496, 497.

ED SP 495 Written Communication and Collaboration for the Resource Teacher 3(3,0) Focuses on the development of written communication skills to enhance special education teachers' collaboration with parents, regular educators, public and private agencies. Offered spring semester only. *Preq:* ED SP 492, 493, 494, 496; concurrent enrollment in ED SP 416 or 498.

ED SP 496 Special Education Field Experience 3(0,9) Supervised practical experience prior to Directed Teaching for preservice special education teachers preparing to teach individuals with mild/moderate disabilities. Offered fall semester only. *Preq:* ED SP 374, 491; concurrent enrollment in ED SP 492, 493, 494, 497.

ED SP 497 Secondary Methods for Individuals with Disabilities 3(3,0) Preparation for working with students with mild/moderate disabilities in secondary schools. Focus is on literature, methods, and materials for providing instruction in transition, self-determination, knowledge within content areas, functional skills, and integration into the community. Offered fall semester only. *Preq:* ED SP 374, 491; concurrent enrollment in ED SP 492, 493, 494, 496.

ED SP 498 Directed Teaching in Special Education 12(1,33) Comprehensive course providing a full-time, semester-long experience for preservice special education teachers who plan to teach individuals with mild/moderate disabilities. Generally the last course in the program; provides teaching experience under the supervision of University and school personnel. Offered spring semester only. *Preq:* ED SP 492, 493, 494, 496, 497; concurrent enrollment in ED SP 495.

TECHNOLOGY AND HUMAN RESOURCE DEVELOPMENT

Professors: W. L. Havice, W. D. Paige; *Associate Professor:* C. E. Poston; *Visiting Instructor:* W. B. Doty; *Lecturer:* H. L. Harrison

THRD 110 Introduction to Career and Technology Education 3(2,3) Examines the philosophy of technology education in the public school system and the philosophy and organization of training and development. Students are given an orientation to the major in Technology and Human Resource Development and an overview of the principles of technology.

THRD 115 Contemporary Technological Problems 3(3,0) Provides students with an understanding of the problems and contributions of technology. Examples are taken from historical accounts and from analyses of contemporary technological intervention both in industrialized and nonindustrialized countries.

THRD 160 Training Programs in Industry 3(3,0) Introduction and first-hand experience in industrial training programs. Emphasis is on observing and participating in actual training situations as well as communications and media usage in industry. *Preq:* THRD 110.

THRD 180 Introduction to Technical Drawing and Computer-Aided Drafting 3(1,6) Introductory drafting course utilizing traditional drafting techniques and computer software to explore technical drawing and orthographic projection through construction of multiview and isometric projections, sectional and auxiliary views, dimensioned working drawings, developments, and intersections. Freehand sketching is a means of problem solving and analysis.

THRD 181 Technical Design 3(1,6) Provides students with the basic procedures involved in the design of a new technology product, including needs identification; functional analysis; functional allocation; resource identification; optimization; and schedule, cost, and performance management. *Preq:* THRD 110, 180 or equivalent; or consent of instructor.

THRD 220 Manufacturing Technology I: Systems 3(2,3) Introduction to management, personnel, and production systems studies through the creation of a corporation. Includes product identification, product research and design, selection of processes, plant design, production systems, and system enhancement. *Preq:* THRD 110 and 180 or consent of instructor.

THRD 221 Exploring Technology 3(3,0) Covers a wide range of technological concepts along with familiar examples of how technology impacts our lives as individuals, a society, and a global community.

THRD 224 Machine Tool Processes 3(2,3) Basic practical shop experiences on the lathe, drill press, milling machine, and shaper. Benchwork, measuring tools, theory, and demonstrations related to a survey of fundamental machining practices.

THRD 230 Construction Technology I: Materials 3(2,3) Introduction to the commonly used building materials and methods of combining them in present day construction. *Preq:* THRD 110 or consent of instructor.

THRD 240 Power Technology I: Production 3(2,3) Study of power in terms of energy sources and the generation of power. Emphasis is on the development of insights and understandings of the scientific and operational principles involved in the production and utilization of power. *Preq:* THRD 110 or consent of instructor.

THRD 250 Electricity 3(2,3) Theory and application of DC and AC fundamentals, including instrumentation, power sources, circuit analysis, motors, construction wiring, and electronic principles and components.

THRD 280 Communications Technology I: Processes and Materials 3(2,3) Topics include graphic communications, photography, computer application and use as a visual communication medium, and audio/video production and application.

THRD 310 Designing Creative Instruction 3(2,2) Provides preservice teachers with opportunities to develop skills in technological literacy, design, inquiry-based instruction, and problem solving using a variety of media, with emphasis on their applications in the elementary curriculum. *Preq:* Junior standing in Early Childhood or Elementary Education or consent of instructor.

THRD (ED F) 315 Technology Skills for Learning 1(0,2) See ED F 315.

THRD 360 Safety 3(3,0) Study of the relationship of training and safety personnel to the kinds of tasks they are asked to perform. Emphasis is on safety knowledge development and on techniques which may be used in safety training.

THRD 370 Motivation and Discipline in Career and Technology Education 3(3,0) Provides classroom teachers and prospective teachers with knowledge and skills in techniques of student discipline and motivation with application to the technology education settings.

THRD 371 Management of Career and Technology Education Laboratories 3(2,2) Management and operation of unit and multiple-activity laboratories, including laboratory design, selection and procurement of tools and equipment, budgeting management, and coordination of activities in laboratory courses.

THRD 390 Cooperative Experience I 6(0,18) Full-time work experience in industry. Students are requested to register with the instructor one semester prior to the summer in which they plan to enroll. Offered summer session only.

THRD 410, 610 Selected Topics 1-3(1-3,0) Subject areas organized according to program needs. Content is planned cooperatively by the University and the school system or agency requesting the course. May be repeated for a maximum of 18 credits, but only if different topics are covered. *Preq:* Consent of instructor.

THRD 415, 615 History and Philosophy of Career and Technology Education 3(3,0) Study of career and technology education programs with the intent of developing a sound individual philosophy. General topics covered are history, local, state, and federal legislation; types of career and technology programs; professional organizations and career guidance.

THRD 420, 620 Manufacturing II: Computer-Integrated Manufacturing 3(2,3) Study of computer-integrated manufacturing and its related concepts, including robotics, computer numeric control, electronic pneumatic and sensor systems, programmable logic controllers, and ancillary devices. *Preq:* THRD 220 or consent of instructor.

THRD 430, 630 Construction Technology II: Practices and Systems 3(2,3) Study of industrial practices and systems affecting man, materials, and equipment associated with construction industries. Activities are directed toward developing a working knowledge of construction technology and a framework for incorporating this instruction into programs in the public and private sectors. *Preq:* THRD 230.

THRD 440, 640 Power Technology II: Transmission and Control Systems 3(2,3) Continuation of THRD 240. Instruction in transmitting and controlling power for utilization in such areas as manufacturing, communications, construction, and transportation. Introduces concepts of automation and robotics to enable the classroom teachers and industry personnel to gain necessary insights into this important area of technology. *Preq:* THRD 240.

THRD 450 Electronics for Educators 3(1,6) Principles of electronics as applied in communications and automatic controls involving transistors, integrated circuits, and other electronic devices and materials for the preparation of teachers of industrial arts and vocational-technical electricity and electronics. *Preq:* THRD 250 or equivalent.

- THRD 460, 660 Developing Training Programs for Industry 3(3,0)** Identification, selection, and organization of subject matter for industrial training programs. Emphasizes analysis techniques, session and demonstration planning, written instructional materials development, trainee evaluation, and planning instructional schedules. *Prq:* Senior standing in Workforce Training Concentration or consent of instructor.
- THRD 461 Workplace Safety 3(3,0)** Consideration of safety-related problems in the workplace. Emphasis is placed on OSHA regulations and procedures. *Prq:* THRD 360.
- THRD 465, 665 Conducting and Evaluating Training Programs 3(3,0)** Basic concepts of supervision, administration, and management of training programs. Emphasis is on determining training requirements, planning, directing, and evaluating training programs. *Prq:* THRD 160, 460 or consent of instructor.
- THRD 468, H468, 668 Public Relations 3(3,0)** Emphasizes techniques and methods of effective public and industrial relations which contribute to understanding and cooperation of labor, business, professional, educational, and industrial groups.
- THRD 470, 670 Course Organization and Evaluation 3(3,0)** Problems, techniques, and procedures in the preparation, selection, and organization of subject matter for instructional purposes. Methods, techniques, and preparation of materials used in the evaluation of student achievement in industrial education subjects.
- THRD 471, 671 Teaching Career and Technology Education 3(3,0)** Effective methods for teaching and training in career and technology education. Emphasis is given to class organization, preparation of lesson outlines, and audio-visual aids.
- THRD 472 Advanced Instructional Methods 3(3,0)** Familiarizes students with the various equipment, materials, and techniques associated with the delivery of instruction. Students design, produce, and present materials to meet specific educational objectives. *Prq:* THRD 471 or one year of teaching experience.
- THRD 473, 673 Assessment in Career and Technology Education 3(3,0)** Study of competency testing in career and technology education which includes educational objectives and measurement; construction and use of oral, objective, short answer, matching, essay, and performance tests; and treatment of test data for grade assignments and statistical analysis.
- THRD 477 Directed Teaching 12(0,36)** Supervised observation and teaching in cooperation with selected public schools in which opportunities are provided for securing experience in teaching industrial subjects. *Prq:* THRD 371, 471, 2.0 cumulative grade-point ratio.
- THRD 478 Internship in Career and Technology Education I 6(0,18)** Supervised observation and teaching in cooperation with selected area career centers, high schools, and technical colleges to provide experience in teaching specified subjects. *Prq:* THRD 371, consent of instructor.
- THRD 479 Internship in Career and Technology Education II 6(0,18)** Continuation of THRD 478. *Prq:* THRD 478, consent of instructor.
- THRD (AG ED, ED F) 480, 680 Educational Applications of Microcomputers 3(2,2)** See ED F 480.
- THRD (AG ED, ED F) 482, 682 Advanced Educational Applications of Microcomputers 3(2,2)** See ED F 482.
- THRD 483, 683 Architectural Drafting for Career and Technology Education 3(1,6)** Study of the major aspects of architectural drawing, such as plot, floor, and foundation plans; wall sections; and elevations. *Prq:* THRD 180.
- THRD 484, 684 Communications Technology II: Systems 3(2,2)** Continuation of THRD 280. Includes theory and operation of communications systems: telegraph, telephone, radio, television, satellites, sound/video recorders, lasers, and computers. Instruction on strategies for interpreting this area of technology to trainees and students is emphasized. *Prq:* THRD 280.
- THRD 486, 686 Instructional Media Development 3(1,4)** Basic instructional media development techniques are presented. Students develop material using authoring software such as HyperCard, transparencies using Persuasion and/or PowerPoint, and fully storyboarded, scripted, and edited digital as well as analog video.
- THRD 490 Cooperative Experience II 6(0,18)** Continuation of THRD 390.
- THRD 491 Special Projects 3(3,0)** Students are assigned projects in accordance with their needs and capabilities. Projects are either experimental, theoretical, or developmental and cover subjects not thoroughly covered in other courses. Written project approval is required before registering. *Prq:* Consent of instructor.
- THRD 492, 692 Advanced Projects 1-6** Students gain depth in content by completing projects under the supervision of an instructor in career and technology education. Written approval is required before registering. May be repeated twice for a maximum of six credits. *Prq:* Consent of instructor.

TEXTILES

Professors: J. R. Aspland, S. B. Bhaduri, D. A. Brosnan, M. J. Drews, M. S. Ellison; B. C. Goswami, C. W. Jarvis, B. I. Lee, G. C. Lickfield, H. J. Rack, K. A. Richardson, *Director*; E. A. Vaughn; *Associate Professors:* J. M. Ballato, S. H. Foulger, E. C. Skaar, T. D. Taylor; *Assistant Professors:* P. Brown, J. Luo, I. A. Luzinov

TEXT 175 Introduction to Textile Manufacturing 3(3,0) Introduction to the broad fields of textile, fiber, and polymer science and engineering with emphasis on the scientific, technological, and business principles utilized in producing fibers, yarns, and fabrics; enhancing fabric functionality by dyeing, finishing, and printing; and establishing end-use products.

TEXT 176 Natural and Man-Made Fibers 4(3,3) Concept of natural and synthetic polymers as the raw materials of the textile industry is introduced. Survey of the origin, characteristics, and processing properties of various natural fibers and fiber-forming synthetic polymers. Formation of textile fibers from polymeric materials is presented with specific emphasis on the polymer science and engineering principles.

TEXT 201 Yarn Structures and Formation 4(3,3) Study of fiber processing systems required to transform various fibrous materials into yarn. Involves the machine principles and theories, relationship of the fibers to the process and the resultant yarn structures, and subsequent analysis of the yarn structure to define quality and to determine suitable manufacturing practices. *Prq:* TEXT 175 and 176 or consent of instructor.

TEXT 202 Fabric Structures, Design, and Analysis 4(3,3) Study of fabric formation techniques designed to explore the principles and theories of modern technology. Evaluation and analysis of weaving, knitting, and nonwoven fabrication of textile structures. *Prq:* TEXT 201 or consent of instructor.

TEXT 308 Apparel 4(3,3) Introduction to apparel construction techniques and analysis of problems commonly encountered in the apparel industry. Evaluation of fabric design and properties. *Prq:* TEXT 202 or consent of instructor.

TEXT 314 Chemical Processing of Textiles 4(3,2) Concepts of current procedures in the chemical, mechanical, and physical preparation and in bleaching, dyeing, printing, and finishing of fabrics are presented; colorimetric and spectrophotometric methods of color control and test methods for the evaluation of the effectiveness of the treatments are emphasized. Not open to Polymer and Textile Chemistry or Textile Management (Chemical) majors.

TEXT 324 Textile Statistics 3(3,0) Introduction to statistics with particular application to the textile industry. Measures of central value and variation, probability, the normal curve, tests of hypotheses, elementary correlation, and regression. *Prq:* Sophomore standing or consent of instructor.

TEXT 333 The Textile Arts 3(2,3) Surveys development of the hand loom from prehistoric times to the present. Studio work in the elements of hand-woven fabrics, their design, analysis, and production of four-harness counterbalance and jack looms. *Prq:* Junior standing or consent of instructor.

TEXT 403 Fiber Processing III 3(2,2) Concepts of current fiber processing machines, techniques, practices, and their validity are investigated. Problems are assigned that require use of acquired knowledge, textile testing equipment, and processing machines. The relation of fibrous material properties and processing dynamics to the fiber assemblies produced is studied. *Prq:* TEXT 201.

- TEXT 411 Fabric Development III 3(2,2)** Study of specifications and loom details for the production of fabrics woven to the customer's order, including multicolor layouts. Warp and filling preparation are covered as well as size formulations and their methods of application. Warping and dressing plans are developed for the warper and the slasher. *Preq:* TEXT 202.
- TEXT 414 Knitted Structures 3(3,0)** Survey of knitted structures dealing with the principles and mechanisms involved. Various systems are covered with emphasis on fiber and yarn requirements and fabric properties.
- TEXT 416 Nonwoven Structures 3(2,2)** Nonwoven fabric structures, their manufacture, properties, and applications. Methods of nonwoven fabric formation, resultant material characteristics and end-use applications are examined. *Preq:* TEXT 201.
- TEXT 421, H421 Fiber Science 3(2,2)** Familiarizes students with the physical properties of textile and high performance fibers and how these properties influence process and end-use performance; method of measuring those properties; and how those properties are related to structural features of the fiber.
- TEXT 422, 622 Properties of Textile Structures 3(2,2)** Yarn and fabric properties, their scientific significance and analysis. Dimensional, structural, and mechanical interrelationships are established and evaluated.
- TEXT 426, 626 Instrumentation 3(3,0)** Principles of industrial and process instrumentation and control as applied in the textile industry; static and dynamic characteristics of measurement devices; transducer principles and techniques of their application for measurement of physical properties such as pressure, temperature, flow, weight, etc.; principles of process controllers; applications of computers in textile process control.
- TEXT 428 Textile Research 1-3** Investigation of a problem in textile, fiber, or polymer science under the direct supervision of a faculty member. After completing the research, student prepares a formal written report which is presented orally. *Preq:* Senior standing or consent of instructor.
- TEXT 429 Textile Research 1-3** Continuation of TEXT 428.
- TEXT 440 Color Science 3(2,3)** Application of the science of color to industrial practice in textiles, plastics, paints, lighting, and ceramics. Laboratory work is performed on modern instruments and computers.
- TEXT 445, 645 Special Topics in Textile, Fiber, and Polymer Science 1-3(1-3,0)** Special topics in textile, fiber, and polymer sciences. A co-enrollment course for similar courses in other departments such as for those students involved in CAEFF projects and CH E 445. There may be different sections in a term to cover different topics. May be repeated for a maximum of nine credits, but only if different topics are covered. *Preq:* Consent of instructor.
- TEXT 460, 660 Textile Processes 3(3,0)** Survey of machinery and processes of textile manufacturing from fiber formation through fabric finishing. For students with a nontextile background.
- TEXT 470 Textile Costing and Inventory Control 3(3,0)** Study of the principles of costing as they specifically apply to the manufacture of textiles. Allocation of cost of material, labor, and overhead: determining the unit cost of yarns, fabrics, and finishes. Inventory systems, storage, materials handling, and profiles. *Preq:* TEXT 202 or consent of instructor.
- TEXT 471 Plant Layout and Processing Design 3(3,0)** Survey of the essentials necessary for textile process implementation from the pilot plant concept to a functioning textile process facility. Material flow requirements, power requirements, machinery layout, environmental controls, and facility design are considered. *Preq:* TEXT 202.
- TEXT 472, 672 Textile International Trade 3(3,0)** Analyzes the current structure of the international textile trade including imports, exports, tariffs, and trade requirements. Field experience with local firms is used to enhance students' understanding. *Preq:* Senior standing or consent of instructor.
- TEXT 475, 675 Textile Marketing 3(3,0)** Examination of the activities involved in the distribution of textile products in today's market. Emphasis is placed on the role of consumer research and the analysis of fashion in the design and promotion of textile products.
- TEXT 476, 676 Carpet Manufacturing 3(3,0)** Study of the materials, manufacturing technologies, products, and practices associated with the carpet manufacturing sector of the textile industry. Raw materials, product design, formation and finishing systems, evaluation methods, distribution, and end-use applications are examined. *Preq:* TEXT 201, 202, or consent of instructor.
- THEATRE**
- Professors:* D. J. Hartmann, R. C. Sawyer; *Assistant Professors:* C. A. Collins, A. G. Harrington, K. Johnson, A. M. Penna; *Lecturer:* C. Collins
- THEA 210, H210 Theatre Appreciation 3(3,0)** Examination of the theatre event approached through historical context, play reading, analysis of production practices, and field trips to live dramatic performances.
- THEA 267 Stage Makeup Techniques 3(2,1)** Practical study of basic stage makeup techniques for the acting student including corrective makeup, modeling with paint, three-dimensional makeup, prosthesis with latex, and makeup for other media.
- THEA 277 Production Studies in Theatre 3(3,0)** Study of technical production and design including scenery, costume, and lighting through the examination of plays in production.
- THEA 278 Acting I 3(2,3)** Fundamentals of acting; basic stage techniques; exercises in interpretation, improvisation, characterization; experience in supervised scene study.
- THEA 279 Theatre Practicum 1(0,3)** Practical work in theatre on a production designed for public presentation. May be repeated for a maximum of four credits.
- THEA 315 Theatre History I 3(3,0)** Historical survey of Western theatre. Emphasis is placed on the changing roles of the playwright, director, actor, technician, and spectator from antiquity to the Renaissance. *Preq:* Sophomore standing.
- THEA 316 Theatre History II 3(3,0)** Historical survey of Western theatre. Emphasis is placed on the changing roles of the playwright, director, actor, technician, and spectator from the Renaissance to the present. *Preq:* Sophomore standing.
- THEA 317 African American Theatre 3(3,0)** Acquaints students with the origin and development of African American playwrights, plays, players, and their contributions to the American theatre from the 19th century to the present.
- THEA (ENGL) 347 The Structure of Drama 3(3,0)** Introduction to the creative writing and critical study of drama. *Preq:* ENGL 310 or consent of instructor.
- THEA 367 Costume Technology 3(2,3)** Theory and practice of costume technology including equipment, patterning, fabric identification, cutting, construction, and fitting.
- THEA 368 Voice for the Stage 3(2,3)** Study of the principles of vocal production and standard American speech for the stage; exercises in breath support and projection, improving tonal quality, and elimination of regional dialects through the study of the International Phonetic Alphabet. *Preq:* Sophomore standing.
- THEA 372 Creative Drama 3(3,0)** Practical applications using creative drama as a learning tool to strengthen curriculum goals and heighten student participation in the classroom. Students develop classroom teaching strategies based on drama education. Appropriate for elementary and secondary teachers, artists, and workshop leaders.
- THEA 374 Stage Movement for Actors 3(1,2)** Study of the psychological and physical sources of movement in the human body, with emphasis on the attainment of intellectual and physical control and the application of the skills to the development of a role.
- THEA 376 Stage Directing I 3(2,3)** Directing and staging techniques for the proscenium stage; exercises in composition, movement, picturization; experience in direction of scenes. *Preq:* Sophomore standing.
- THEA 377 Stagecraft 3(2,3)** Theory and practice of stage design and technology. *Preq:* Sophomore standing.
- THEA 379 Acting Ensemble 1(0,3)** Performance opportunities in the area of theatre for young audiences. Students are members of a theatrical touring troupe and perform in a variety of spaces and locations. May be repeated for a maximum of four credits. By audition only.
- THEA 398 Special Topics in Theatre 3(3,0)** Select areas of study in theatre not addressed by other theatre course offerings. May be repeated once. *Preq:* Consent of instructor.
- THEA (ENGL) 430, 630 Dramatic Literature II 3(3,0)** See ENGL 430.
- THEA (ENGL) 447, 647 Playwriting Workshop 3(0,3)** Workshop in the creative writing of plays. May be repeated once. *Preq:* THEA (ENGL) 347 or consent of instructor.

THEA 467 Costume Design 3(3,0) Theory and practice of costume design for the theatre including the study of production concept and styles, sketching, and rendering. *Preq:* THEA 367 or consent of instructor.

THEA 472, 672 Improvisation: Interpreting and Developing Texts 3(3,0) Practical applications using drama as a learning tool to strengthen writing skills, motivate collaboration, heighten analytical skills. Students use improvisation to analyze texts and to revise original work, consider theory and research of contemporary scholars, and develop approaches to literature and composition based on readings and drama experiences. *Preq:* Senior standing or consent of instructor.

THEA 476 Stage Directing II 3(2,3) Continued study in the art of stage directing, emphasizing leading contemporary theory and methodology. Culminates in the production of a one-act play for public presentation. *Preq:* THEA 376 or consent of instructor.

THEA 477 Stage Design 3(2,3) Study and practice in stage design, including drafting, graphics, drawing, rendering, scene painting, and light plotting. *Preq:* THEA 377 or consent of instructor.

THEA 479 Acting II 3(2,3) Continued study in the craft of acting for contemporary Western theatre. Students focus on monologue and scene study in a variety of performance settings. *Preq:* THEA 375 and consent of instructor.

THEA 487, 687 Stage Lighting I 3(2,1) Theory and practice of stage lighting through an understanding of various lighting instruments, lighting control systems, and execution of lighting designs.

THEA 488 Stage Lighting II 3(2,3) Study of advanced stage lighting theories and practices including script analysis, technology, software and execution of lighting designs. Other topics include unions and contracts, shop orders, and assisting the lighting designer. *Preq:* THEA 487 or consent of instructor.

THEA 497, 697 Scene Painting 3(2,1) Practical study of basic painting techniques for the theatre including layout, proper use of materials, painting styles, and texturing techniques.

THEA 499, 699 Independent Studies 1-3(1-3,0) Tutorial work for students with special interests outside the scope of existing courses. May be repeated for a maximum of six credits. *Preq:* Consent of department chair.

WILDLIFE AND FISHERIES BIOLOGY

Professors: A. G. Eversole, J. W. Foltz, D. C. Guynn, J. J. Isely, P. A. Layton, *Chair:* T. E. Schwedler, V. B. Shelburne, J. R. Sweeney; J. R. Tomasso, Jr., G. W. Wood, G. K. Yarrow; *Associate Professors:* W. W. Bowerman, A. R. Johnson, J. D. Lanham; *Instructors:* C. J. Cummings, J. R. Davis

W F B 101 Introduction to Wildlife and Fisheries Biology 1(1,0) Informative sketch of aquaculture, fisheries science, and wildlife management. Introduces principles, resources, professional organizations, and careers in these fields. Offered fall semester only. *Preq:* Wildlife and Fisheries Biology major or consent of instructor.

W F B 102 Methods of Wildlife and Fisheries Biology 1(0,2) Introduction to methodology used in aquaculture, fisheries science, and wildlife management. Students are introduced to terminology, techniques, laws, and legislations. Skills with dimensions, units, computations, and technical communications as applied to aquaculture, fisheries, and wildlife. *Preq:* Wildlife and Fisheries Biology major. *Coreq:* W F B 101.

W F B 300 Wildlife Biology 3(3,0) Natural history, biology, and conservation of wildlife managed by natural resource agencies. Attention is given to those factors important in the management and conservation including species distribution and abundance, habitat requirements, and life-history characteristics. Principles and problems associated with conservation of selected wildlife species are covered. *Preq:* Two semesters of introductory biology.

W F B 301 Wildlife Biology Laboratory 1(0,3) Identification of wildlife species with emphasis on game and non-game wildlife species managed or protected by state and federal agencies. One or more required weekend field trips will be scheduled. *Preq:* Wildlife and Fisheries Biology major. *Coreq:* W F B 300.

W F B 306 Introduction to Wildlife Conservation 2(2,0) Examines the fundamental thinking upon which modern conservation programs have been built.

W F B 307 Hunting and Wildlife Management 1(1,0) Hunting techniques used to harvest renewable wildlife resources are examined with respect to their roles in sound management practices. The effects of selected hunting regulations on wild populations, safety, and ethics are discussed. *Preq:* Junior standing or consent of instructor.

W F B (BIOSC) 313 Conservation Biology 3(3,0) Study of the biological bases for the conservation of flora, fauna, and habitats. Biological factors that influence the decision-making process are also addressed. *Preq:* One year of general biology or consent of instructor.

W F B 350 Principles of Fish and Wildlife Biology 3(3,0) Introduction to principles of fisheries and wildlife biology on which sound management practices are based. Interrelationships of vertebrate and invertebrate biology, habitat, and population dynamics are covered. *Preq:* One year of general biology.

W F B 410, 610 Wildlife Management Techniques 3(1,6) Covers field and laboratory methods commonly used in wildlife management and research. Students interact with wildlife professionals. Topics include research methodology, estimating wildlife population characteristics, condition measures, and food habits; species determination, sex, and age; capture; population monitoring methods; GIS and mapping techniques, habitat evaluation and improvement. *Preq:* Junior standing, one year of general biology.

W F B 412, H412, 612 Wildlife Management 3(2,3) Basic principles and general practices of wildlife management and conservation are covered. Major problems concerning the management of wildlife resources, with emphasis on upland game species. Laboratory work includes practical work on the Clemson University woodlands and field trips to several areas where wildlife management is being practiced.

W F B 414, 614 Wildlife Nutritional Ecology 3(3,0) Concepts of how terrestrial wildlife obtains and utilizes energy and nutrients in wild ecosystems are taught. Energy and nutrient availability are discussed in the ecological context of distribution, flow, and cycling in natural and modified foraging areas. Physiology of digestion is discussed for major homeotherms. *Preq:* FOR 415 or W F B 412.

W F B 416, 616 Fishery Biology 3(2,3) Principles underlying freshwater fish production. Introduction to major groups of freshwater fishes and their habitats. Topics include identification, age and growth, fecundity, food habits, populations estimation, environmental evaluation, management practices, and fish culture. *Preq:* One year of introductory biology, Junior standing.

W F B 418 Fishery Conservation 3(3,0) Survey of conservation efforts directed toward freshwater and marine fisheries resources. Topics include threatened, endangered, over-exploited species and introductions of exotic species. *Preq:* Two semesters of introductory biology.

W F B 430, 630 Wildlife Conservation Policy 3(3,0) Deals with the ecological rationale and management implications of public policy designed for the conservation of American wildlife resources. Emphasis is on managed-land issues. *Preq:* W F B 350 or consent of the instructor.

W F B 440 Non-game Wildlife Management 3(3,0) Basic principles and general practices of non-game wildlife management are covered. Emphasis is placed on those principles and practices most appropriately used by state agencies in their management programs for non-game species, along with real-world problems associated with implementation of such programs. *Preq:* Two semesters of introductory biology.

W F B 444, 644 Wildlife Damage Management 3(2,3) Covers the philosophical, sociological, ecological, and economical basis for controlling damage caused by animals problem wildlife populations. Emphasis is placed on fundamentals of prevention and control of damage caused by vertebrate species, especially mammals and birds. Includes interaction with federal and state agencies and private consultants. *Preq:* One year introductory biology.

W F B 445 Urban Wildlife Management 3(3,0)

Focuses primarily on social, scientific, and ecological aspects of managing wildlife in the urban setting. Basic wildlife management techniques as well as urban planning for wildlife are covered. *Preq:* One year of general biology or consent of instructor.

W F B 450, 650 Aquaculture 3(3,0)

Basic aquacultural techniques applied to freshwater and marine organisms; past and present culture of finfishes and shellfishes around the world; principles underlying fish production; water quality, feeding, and nutrition as they influence production of cultured aquatic organisms. *Preq:* One year of general biology, Junior standing.

W F B 460, 660 Warmwater Fish Diseases 2(2,0)

Study of diseases in warmwater fish including infectious and noninfectious processes. *Preq:* One year of general biology, Junior standing, consent of instructor.

W F B 462, H462, 662 Wetland Wildlife Biology 3(3,0)

Study of wetland wildlife habitats, emphasizing classification by physical, chemical, and biological characteristics; importance of wetland habitat for management and production of wetland wildlife species. Offered fall semester only. *Preq:* BIOL 103/104 or 110/111.

W F B 463 Directed Research in Aquaculture, Fisheries, and Wildlife Biology 1(0,3)

Research problems in selected areas of aquacultural, fisheries, or wildlife science to introduce students to experimental design, research techniques, and presentation of research results. May be repeated for a maximum of three credits. *Preq:* Junior standing, consent of instructor.

W F B (BIOSC, ENT) 469, H469, 669 Aquatic Insects 3(1,6) See ENT 469.

W F B 490 Field Training in Aquaculture, Fisheries, and Wildlife 3(0,9)

Four-to-five-week program in which students observe aquaculture, fisheries, or wildlife management. Students have supervised management responsibility. Total of 135 hours required. Must be arranged at least two months in advance. To be taken Pass/Fail only. *Preq:* Senior standing in Wildlife and Fisheries Biology or consent of instructor.

W F B 493 Selected Topics 1-4(0-4,0-12)

Specialized topics which explore current areas of research and management in aquaculture, fisheries science, or wildlife management are examined in lecture/seminar format. May be repeated for a maximum of ten credits, but only if different topics are covered. *Preq:* Junior standing, consent of instructor.

W F B 498 Senior Portfolio 1(1,0)

Collection of Web-based materials representing the creative and scientific papers, presentations, and résumés written by students to satisfy curriculum requirements. Students are regularly informed regarding the format and content of their portfolios. *Preq:* Senior standing in Wildlife and Fisheries Biology. *Coreq:* F N R 499.

WOMEN'S STUDIES

Professor: J. M. Melton; *Associate Professor:* E. K. Sparks; *Assistant Professor:* M. Shockley; *Lecturer:* S. Watts

W S 301 Introduction to Women's Studies: Women's Lives 3(3,0)

Interdisciplinary course exploring the unique features of women's lives from childhood to old age. Content is based on new research in many disciplines, including psychology, sociology, history, literature, and the arts. *Preq:* Sophomore standing.

W S 459, 659 Selected Topics in Women's Studies 1-3(1-3,0)

Topics change from semester to semester and are announced prior to registration. May be repeated for a maximum of six credits, but only if different topics are covered.

W S 498 Advanced Studies in Women's Studies 3(3,0)

Focuses on the theoretical foundations for women's studies, with particular emphasis on how women's studies research and theory influence institutions and governmental policies. Readings include essays on such central women's studies issues as work, family, children, health care, legislation, and government policies. *Preq:* W S 301 or consent of instructor.