### COURSES OF INSTRUCTION

This list includes for each course the catalog number, title, credit hours, class and laboratory hours per week, description, and prerequisites. Courses numbered 600 and above are graduate courses.

#### Cross-Listed Courses

A cross-listed course is one that can be taken for credit under different departmental titles. For example, students can take Demography as either R S 471 or SOC 471. The student should select the desired departmental title in conference with an advisor. The departmental title may be changed only during the period allowed by the University calendar for adding a course.

#### COURSE ABBREVIATIONS

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<th>Abbreviation</th>
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ACCOUNTING


ACCT 201, H 201 Financial Accounting Concepts 3(3,0)
Introduction to accounting principles with emphasis on the use of financial data and analysis of financial statements.

ACCT 202, H 202 Managerial Accounting Concepts 3(3,0)
Introduction to managerial accounting with emphasis on using accounting information to make decisions.

ACCT 204 Accounting Procedures 1(1,2)
Lectures, demonstrations, and hands-on experience with accounting systems and analysis required to complete the accounting cycle and prepare financial statements. Intended for students who plan to enroll in ACCT 303 or 311.

ACCT 303, H 303 Cost Accounting 3(3,0)
Application of cost accounting to manufacturing and distributing problems; analysis of behavior characteristics of business costs and a study of principles involved in standard cost systems; lectures and problems. Prep: A C C T 201 and 204 with a C or better.

ACCT 307, H 307 Managerial Accounting 3(3,0)
Emphasizes cost accounting management data as the manager in establishing plans and objectives, controlling operations, and making decisions involved with management of a large business enterprise. May not be taken for credit unless ACCT 307 with a C or better.

ACCT 311, H 311 Intermediate Financial Accounting I 3(3,0)
In-depth treatment of traditional financial accounting topics of standards setting, financial statement form and content, and accounting and reporting of current assets. Emphasizes basic theory, valuation, and measurement, as well as presentation and analysis of accounting information. Prep: A C C T 201 and 204 with a C or better.

ACCT 312, H 312 Intermediate Financial Accounting II 3(3,0)
Continuation of A C C T 311. In-depth treatment of accounting and reporting for noncurrent assets, current and noncurrent liabilities, and equity. Emphasis is placed on basic theory, valuation, and measurement issues, as well as presentation and analysis of accounting information. Prep: A C C T 311 with a C or better.

ACCT 313, H 313 Intermediate Financial Accounting III 3(3,0)
Continuation of A C C T 312. In-depth treatment of selected accounting topics, such as investments, cash flows, tax allocations, post-retirement benefits, leases, and error corrections. Emphasis is placed on basic theory, valuation, and measurement, as well as presentation and analysis of accounting information. Prep: A C C T 312 with a C or better.

ACCT 322 Accounting Information Systems 3(3,0)
Study of computer-based accounting systems with attention to systems design, application, internal control, auditing the system, and system security. Prep: CP SC 220.

ACCT 340 Internal Auditing Theory 3(3,0)
Introduces students to internal auditing and covers internal auditing standards, ethics, concepts, audit techniques, and reporting practices. Enrollment priority will be given to students who have completed 30, but not more than 100, credits. Prep: A C C T 311 with a C or better.

ACCT 399 Internship in Accounting 1-3(1-3,0)
Faculty-supervised accounting internship designed to give students learning opportunities that support their classroom experiences. Requires a minimum of six full-time weeks. Course enrollment and internship must occur in the same semester. Simultaneous credit cannot be received for another internship offering. May be repeated for a maximum of three credits. To be taken Pass/Fail only. Prep: Junior standing and consent of instructor.

ACCT 404, H 404, 604 Individual Taxation 3(3,0)
Interpretation of Federal income tax laws, regulations, and court decisions with practice in application of these laws to the returns of individuals, partnerships, and corporations. Prep: A C C T 311 with a C or better.

ACCT 406 Business Taxation 3(3,0)
Provides an introduction to the importance of taxation in business decision making; emphasizes the interrelationship of taxes, the choice of business form, and various business transactions; exposes students to the breadth of business decisions which are affected by the Federal Income Tax. Prep: A C C T 311 with a C or better.

ACCT 408 Retirement and Estate Planning 3(3,0)
Provides students with an understanding of the tax consequences of personal financial, retirement, and estate planning. Subjects covered include the basic concepts of retirement, gift, income shifting, and estate planning. Prep: A C C T 404 with a C or better.

ACCT 410 Budgeting and Executive Control 3(3,0)
Study and application of selected techniques in the planning and control functions of business organizations. Prep: A C C T 303 with a C or better.

ACCT 415 Auditing 3(3,0)
Professional and practical auditing theory. Review of internal controls, audit procedures, and development of audit programs for various types of businesses; consideration of auditors' professional and ethical standards. Prep: A C C T 311 and 322 with a C or better.

ACCT 445 Internal Auditing Practice 3(3,0)
Expands students' knowledge of internal auditing practice, including operation audits, organization audits, quality-control audits, and organization theory. Prep: A C C T 340 with a C or better.

AIR FORCE TODAY I 2(1,2)
Deals with the contemporary world through a study of the total force structure: strategic offensive and defensive, general purpose, and aerospace support. Leadership laboratory activities include drill fundamentals, customs, and courtesies of the service.

AFRICAN AMERICAN STUDIES

A AS 109 Air Force Today II 2(1,2)
Continuation of A S 109. Leadership laboratory includes drill, ceremonies, and an introduction to Air Force career opportunities.

A S 209 Development of Air Power I 2(1,2)
Study of the development of air power from balloons and dirigibles through the peaceful employment of U.S. air power in relief missions and civic action programs in the late 1960s and also the air war in Southeast Asia. Leadership laboratory provides experience in guiding, directing, and controlling an Air Force unit.

A S 210 Development of Air Power II 2(1,2)
Continuation of A S 209.

A S 308 Air Force Leadership and Management 3(3,0)
Motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for development of the leader's professional skills using Air Force examples and methods.

A S 309 Air Force Leadership and Management I 4(3,2)
Emphasizes the individual as a manager. Individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the Air Force officer's professional skills. Students prepare individual and group presentations, write reports, participate in group discussions, seminars, and conferences.

A S 310 Air Force Leadership and Management II 4(3,2)
Continuation of A S 309. Uses the basic managerial processes involving decision making, utilization of analytical aids in planning, organizing, and controlling environment. A case study is an exercise in using basic leadership and communication processes.

A S 409 National Security Policy I 4(3,2)
A study of the role and function of the military officer in a democratic society and the relationships involved in civil-military interactions. Students prepare individual and group presentations, write reports, and participate in group discussions.

A S 410 National Security Policy II 4(3,2)
Continuation of A S 409. Examines the environmental context in which U.S. defense policy is formulated and implemented. Emphasis is placed on initial commissioned service and military justice. Students prepare individual and group presentations for the class, write reports, and participate in group discussions, seminars, and conferences.

AFRICAN AMERICAN STUDIES

Associate Professor: A. A. Bartley

A A S 301 Introduction to Africana American Studies 3(3,0)
Study of Africana American experience from an Afrocentric perspective from colonial America to the present.

A A S 498, 698 Seminar on Africana American Studies 3(3,0)
Research/reading seminar on the Africana American experience. Selected topics and themes from 1900 to present. Prep: A A S 301, HIST 311, 312, or 339.
AG ED 100 Orientation and Field Experience 1(0,2) Supervised observations and explanations of vocational agriculture teaching while serving as teacher aides. One full week of field experience in representative high schools is required.

AG ED 102 Agricultural Education Freshman Seminar 1(2,0) Introduces students to the South Carolina agriculture education structure and provides opportunities to prepare oral presentations on selected agricultural education organizations. A exists students in understanding the value of professional organization to agriculture education in the state and nation. Preq: A agricultural education major.

AG ED 103 Multiculturalism in Agricultural Education 3(3,0) Studies the influence of various groups and their contributions to agriculture. Includes the roles of women, African, Hispanic, Asian, and European-Americans.

AG ED 200 Agricultural Applications of Educational Technology 3(2,2) Overview of microcomputer hardware and software encompassing word processing, spreadsheet, utility, Web development, and graphic communications in an agricultural context.

AG ED 201 Introduction to Agricultural Education 3(2,3) Principles of education, development of agricultural education, and an introduction to the formulation of instructional programs for the teaching of agricultural courses.

AG ED 202 AGRICULTURAL EDUCATION Sophomore Seminar 1(2,0) Instruction on how to establish a comprehensive student record-keeping system. Integration of that data into the FFA. A wards program is included. A llops students hands-on experience with the total FFA A wards program on the state and national level. Preq: A G ED 102.

AG ED 203 Teaching Agriscience 3(2,3) Integrates biological and technological concepts appropriate for teaching introductory middle or secondary school level courses in agricultural science. Topics include disciplines, theories, and applications in modern agricultural production. Experiences include teaching techniques, materials, resources, and the design and implementation of new activities to facilitate teaching agriscience. Preq: B IOL 104.

AG ED 204 Applied Agriculture Calculations 3(3,0) Demonstrates basic mathematical applications in crop and livestock production and agribusiness and financial management. These applications aid students in understanding the mathematical applications needed in the agriculture field.

AG ED 302 Agricultural Education Junior Seminar 1(2,0) A llows students the opportunity to prepare and deliver information on Career Development Events (CDE) and to understand fully the CDE concepts. Students receive much needed hands-on experience at the state and national levels. Preq: A G ED 202.

AG ED 303 Mechanical Technology for Agriculture Education 3(2,3) Study of technical content and new technology utilized in agriculture mechanics. Integrates agriculture mechanistic topics such as electrical wiring and controls, green industry maintenance, irrigation systems, and agriculture construction. Offers a delivery of mechanics instruction in the classroom and laboratory setting.

AG ED 355 Team and Organizational Leadership in the Food and Fiber System 3(3,0) Prerequisites and practices in planning, developing, conducting, and evaluating leadership programs for agricultural groups. Focuses on helping students better understand themselves and others; improving group communications; becoming effective leaders and members of groups; improving leadership and personal development skills; assessing leadership situations; determining and administering appropriate leadership strategies.

AG ED 400 Supervised Field Experience II 1(0,3) Special emphasis is placed on enhancing existing knowledge and experiences of the students. Primary focus is on becoming acquainted with the student teaching center well in advance of the customary twelve-week directed teaching experience.

AG ED 401, 601 Instructional Methods in Agricultural Education 3(2,3) A ppropriate methods of teaching vocational agriculture in high schools. Includes procedures for organizing teaching programs, teaching high school students, and directing FFA activities.

AG ED 402 AGRICULTURAL EDUCATION Senior Seminar 1(2,0) Provides an opportunity to prepare and deliver information on continuing adult education. A exists students in fully understanding the adult education component of the total Secondary Agriculture Education Program. Preq: A G ED 302.

AG ED 403, 603 Principles of Adult/Extension Education 3(3,0) Overview of adult/extension education and adult learning. Selection of adult education providers is reviewed with emphasis on extension. Preq: Junior standing or consent of instructor.

AG ED 404 Biotechnology in Agricultural Education 3(2,3) Multidisciplinary introduction to theories and applications of biotechnology in agriculture and high school agricultural education. Topics include common techniques used in modern biotechnology, examples of their applications, and social considerations that impact the use of biotechnology in agricultural research and development. Laboratories illustrate principles covered in lecture. Preq: B IOL 104.

AG ED 406 Directed Teaching 12(0,36) Guided participation in the professional responsibilities of a teacher of vocational agriculture including intensive study of the problems encountered and competencies developed. Twelve weeks of directed teaching in selected schools are required. Preq: A G ED 400, 401.

AG ED 407 Internship in Extension and Leadership Education 6(0,18-36) Internship placements may include county extension offices and other appropriate extension units. Six weeks of supervised experience must be completed for six hours of credit. Twelve weeks of supervised experience must be completed for 12 hours of credit. May be repeated for a maximum of 12 credits. Preq: A G ED 400, 401, Senior standing, and consent of instructor.

AG ED 409, 609 Agriscience Institute: Applications of Agriscience to the Secondary Curriculum 3(2,2) Designed for pre-service and in-service agricultural educators or secondary-level counselors. Surveys current developments in agriscience with an emphasis on modern practices, current job opportunities, and meeting state and national science and math education standards through agricultural instruction. Students construct lesson plans and career planning modules for high school. Preq: A G ED 102.

AG ED 412 Senior Agriculture Leadership Seminar 1(1,0) Emphasizes leadership techniques and policies that affect agriculture. Students conduct research and make presentations on issues which influence agriculture policy. Preq: A P EC 202, 302.

AG ED 415, 615 Leadership of Volunteers 3(3,0) Provides an overview of volunteer management. The knowledge, skills, and abilities required of professional managers to involve volunteers effectively in the work of organizations are examined.

AG ED 416, 616 Ethics and Issues in Agriculture and the Food and Fiber System 3(3,0) Explores ethical theories, concepts of critical thinking, and major ethical issues in American agriculture. The major social, political, economic, and ethical issues that arise in connection to the "food and fiber system" are examined and potential solutions considered.

AG ED 423, 623 Curriculum 2(2,0) Curriculum goals and related planning for career and continuing education programs.

AG ED 425, 625 Teaching Agriculturc Mechanics 2(1,3) Organizing course content, conducting and managing an agricultural mechanics laboratory, shop safety, microteaching demonstrations of psychomotor skills, and methods of teaching manipulative abilities.

AG ED 428, 628 Special Studies in Agricultural Education 1-3(1-3,0) Students study, individually or collectively, selected topics and/or problems in agricultural education to meet the particular needs of the clientele enrolled. May be repeated for a maximum of six credits.

AG ED 431, 631 Methods in Environmental Education 3(3,0) Study of various techniques appropriate for teaching environmental education. Instruction is applicable to elementary, high school, and adult-level teachers. Offered summer session only.

AG ED 440, 640 Program Development in a Dult/Extension Education 3(3,0) Principles, theory, and practice in planning and conducting educational programs in adult/extension settings. Preq: Junior standing or consent of instructor.
AG ED 450 Modern Topics and Issues 3(3,0)
Major area of concern to teachers of agriculture and county agents is selected for intensive study at least one semester prior to offering the course. Team teaching with faculty from other departments in the College of Agriculture, Forestry, and Life Sciences is utilized when feasible. Preq: Senior standing or relevant experience.

AG ED (F, THRD) 480, 680 Educational Applications of Microcomputers 3(2,2) See ED F 480.

AG ED (F, THRD) 482, 682 Advanced Educational Applications of Microcomputers 3(2,2) See ED F 482.

AGRICULTURAL MECHANIZATION

Professors: W. H. Allen, Chair; D. E. Brune, J. A. Collier, R. B. Dodd, Y. J. Han; Assistant Professor: T. O. Owino

AG M 101 Introduction to Agricultural Mechanization and Business 1(0,3)
Introduction to the Agricultural Mechanization and Business program. An overview of the curriculum is given and the opportunities for extracurricular activities explained. Long-term interaction between the department and alumni is covered.

AG M 205 Principles of Fabrication 3(2,3)
Principles, techniques, and methods in the selection, proper use, and maintenance of hand and power tools. Principal topics include welding, tool fitting, metalworking, woodworking, finishing and preserving, and heat treatment.

AG M 206 Machinery Management 3(2,3)
Agricultural students are taught to apply physical principles and sound reasoning to the mechanization of modern agricultural production and processing enterprises. Planning efficient operational systems and wise selection of equipment, based on function and economic functionality are stressed. Preq: MTH SC 105, PHY S 207 or consent of instructor.

AG M 221 Surveying, Earthwork and Area Measurements 1(1,0)
Fundamentals of surveying relative to earthwork and land area measurements including linear measurements, leveling, angular measurements, and computations. Levels and total stations are used with an introduction to GPS. Preq: MTH SC 102 or 106 or consent of instructor.

AG M 301 Soil and Water Conservation 2(2,0)
Water management in agriculture is studied by applying principles of mathematics, fluid flow, hydrology, and soils as related to soil-water-vegetation complexes in erosion control, water conservation, drainage, and irrigation.

AG M 303 Calculations for Mechanized Agriculture 3(2,3)
Enhances students' ability to analyze and solve a wide range of problems requiring engineering technology. Laboratory periods introduce students to microcomputer hardware. Basic programming and typical applications to agricultural mechanization problems are included. Preq: PHY S 200, 207, or consent of instructor.

AG M 371 Agricultural Mechanization Practicum 1-3
Preplanned internship with an approved employer involved in agricultural technical or business endeavors. A minimum 130 hours of supervised responsibility are required per credit hour. A work journal, written/oral reports, company consent and evaluation must be on file. May be repeated for a maximum of six credits. To be taken Pass/Fail only. Preq: Sophomore standing and consent of department.

AG M 402, 602 Drainage, Irrigation, and Waste Management 3(2,3)
Basic soil-water-plant relationships are used to determine the need for and methods of irrigation, drainage, and waste management. Topics include irrigation methods, drainage needs, drainage methods, and waste-treatment methods.

AG M 405, 605 Agricultural Structures and Environmental Control 3(2,3)
Technical considerations of buildings used for agriculture with emphasis on structural materials, structural adequacy, environmental control, and indoor air quality. Preq: AG M 221, 303, PHY S 200.

AG M 406, 606 Mechanical and Hydraulic Systems 3(2,3)
Study of power transmission systems for agricultural production with emphasis on mobile equipment. Characteristics, requirements, and design of both V-belt drive and roller-chain drives are presented. Emphasizes hydraulic power transmission systems, including pumps, actuators, control devices, and hydraulic circuitry. Preq: AG M 206, PHY S 200 or 207, or consent of instructor.

AG M 408 Equipment Sales and Service 3(3,0)
Agricultural equipment sales and service techniques, inventory, and accounting procedures followed by the farm machinery industry.

AG M 410, 610 Precision Agriculture Technology 3(2,3)
Principles and hands-on application of technologies supporting precision agriculture are included. Topics include global positioning system (GPS), geographic information system software, variable rate technologies, collection of spatial data, automated guidance of equipment, spatial data mapping and analysis, remote sensing, and economic considerations. Preq: Junior standing.

AG M 452, 652 Mobile Power 3(2,3)
Study of tractors with emphasis on internal combustion engines and support systems necessary for their proper functioning. A application of power, maintenance, adjustment, and general repair are also considered. Preq: PHY S 200, 207, or consent of instructor.

AG M 460, 660 Electrical Systems 3(2,3)
Students in agriculture and related curricula study electric and other utilities on the farm and in the home. Selection, installation, and maintenance of wiring systems, lighting systems, motors, controls, water systems, and waste disposal systems are emphasized. Preq: Junior standing.

AG M 472 Capstone 3(2,3)
Covers professional conduct, ethics, oral and written communication, and financial matters. Each student completes a comprehensive project on a technical subject. The results are given in a written report and oral presentation. Digital portfolio technology is used by the student to assess higher education.

AG M 473 Special Topics in Agricultural Mechanization 1-3(1-3,0)
Comprehensive study and application of new technologies and methods not covered in existing courses. Emphasis is placed on independent study using innovative approaches to problem solving. May be repeated for a maximum of six credits. Preq: Consent of instructor.

AGRICULTURE

Professors: L. L. Bauer, D. E. Linvill, V. L. Quisenberry, P. A. Skewes; Associate Professor: W. C. Stringer

AGRIC 104, H 104 Introduction to Plant Sciences 3(3,0)
Fundamental course in plant sciences, including agronomic and horticultural crops of the major agricultural areas of the world and emphasizing the crops of South Carolina.

AGRIC (EN SP) 315, H 315 Environment and Agriculture 3(3,0)
Survey of the interrelationships of the environment and current agriculture and agricultural practices to include both the environmental impacts of agriculture and the role of agriculture in conservation and improving the environment. Preq: Sophomore standing and two semesters of biology or chemistry.

AGRIC 355 Team and Organizational Leadership in Food and Fiber System 3(3,0)
Principles and practices in planning, developing, conducting, and evaluating leadership programs for agricultural groups. Focuses on helping students better understand themselves and others, improving group communications; becoming effective leaders and members of groups; improving leadership and personal development skills, assessing leadership situations, determining and administering appropriate leadership strategies.

AGRIC 412 Senior Agriculture Leadership Seminar 1(1,0)
Emphasizes leadership techniques and policies that affect agriculture. Students conduct research and make presentations on issues which influence agricultural policy. Preq: A P EC 202, 302.

AGRIC 416 Ethics and Issues in Agriculture and the Food and Fiber System 3(3,0)
Explores ethical theories, concepts of critical thinking, and major ethical issues in American agriculture. The major social, political, economic, and ethical issues that arise in connection to the "food and fiber system" are examined and potential solutions considered.

AGRIC 440, 640 Microclimatology 3(3,0)
Study of energy balance in earth's atmosphere and soil: solar and thermal radiation, air and soil temperature, humidity, evaporation and the hydrologic cycle, wind fields. Weather variables to describe microclimates and the energy balance of plants, animals, and insects. Modification of microclimates with respect to rural and urban climates. Preq: PHY S 240 or equivalent or consent of instructor; second semester Junior standing.

AGRIC H 491 Senior Honors Research 3(1,6)
Senior division honors research in an agricultural sciences curriculum. In consultation with and under the direction of a professor, students select a research topic, conduct experiments, record data, and make oral presentations of results to the College Honors Program Committee. Open to approved Honors Program students only.
Agriculture, Forestry, and Life Sciences

A S L 101 American Sign Language I 4(3,1) Introduction to the basics of American Sign Language, its history, and culture. Visual-gestural communication techniques are used.

A S L 102 American Sign Language I 4(3,1) Continuation of A S L 101 and culture to develop further communicative competencies. Proficiency oriented with the use of visual-gestural communication skills. Preq: A S L 101 or consent of instructor.

A S L 201 American Sign Language II 3(3,0) Continuation of A S L 102. Covers additional vocabulary, sentences, and grammar structures. Main focus is on conversational and receptive skills as well as a better understanding of Deaf culture. Preq: A S L 102 or consent of instructor.

A S L 202 American Sign Language II 3(3,0) Continuation of A S L 201, concentrating on intermediate conversational and discourse skills using American Sign Language, more complex American Sign Language grammar, reading comprehension, and composition of short stories, narratives, and dialogues with an emphasis on topics related to the Deaf community. Class is conducted totally in American Sign Language using visual-gestural communicative techniques. Preq: A S L 201 or consent of instructor.

A S L 301 Advanced American Sign Language I 3(3,0) Focuses on American Sign Language fluency, vocabulary development, grammatical structures of American Sign Language, use of classifiers, conversational skills, translating written texts into American Sign Language, and vice versa. Emphasis is on making formal presentations in American Sign Language. Preq: A S L 202 or consent of instructor.

A S L 302 Advanced American Sign Language II 3(3,0) Continuation of A S L 301. Focuses on American Sign Language fluency, vocabulary development, grammatical structures of American Sign Language, use of classifiers, conversational skills, translating written texts into American Sign Language, and vice versa. Emphasis is on making formal presentations in American Sign Language. Preq: A S L 301 or consent of instructor.

A S L 305 Deaf Studies in the United States 3(3,0) In-depth look into language, culture, and daily lives of approximately one million people who use American Sign Language as their primary language. Traces the roots of American Sign Language from pre-revolutionary times to current science and knowledge and how it applies to professional fields. Taught in American Sign Language. Preq: A S L 202 or consent of instructor.

A S L 401 Discourse in American Sign Language I 3(3,0) Designed for advanced-level students in American Sign Language. Primary goal is to further develop students' understanding and knowledge of American Sign Language by incorporating in-depth analysis of American Sign Language's historical development, linguistic structures, syntax, grammar, and pragmatics. Preq: A S L 302 or consent of instructor.

A S L 402 Discourse in American Sign Language II 3(3,0) Continuation of A S L 401. Primary goal is to further develop students' knowledge and understanding of American Sign Language by incorporating analysis of time concepts, variations due to region and ethnicity, pluralization, classifiers, locatives, temporal aspects, and pronoun usage in American Sign Language. Preq: A S L 401 or consent of instructor.

A S L 460 Deaf Literature and Folklore 3(3,0) Designed for advanced-level students in American Sign Language. Primary goal is to further develop students' knowledge and understanding of Deaf literature, folklore, and the community at large. Includes introductions to deaf authors, literary works, plays, poetry, painting, and sculpture. Preq: A S L 302 or consent of instructor.

A VS 100 Orientation to Animal, Dairy, and Veterinary Sciences 1(1,0) Study of the role of animal agriculture in the world today with emphasis on supply and demand of end products and careers available in the animal industry.

A VS 101 Dairy Foods 1(1,0) Production aspects of dairy foods from the farmer to the consumer including such products as ice cream, yogurt, and various cheeses; the use of these foods for nutrition and pleasure. Students who have received credit for A VS 430 will not be allowed to enroll in or receive credit for A VS 101.

A VS 102 Mammalian Reproduction 1(1,0) Physiology and endocrinology of the reproductive processes in male and female mammals with emphasis on farm animals. Control of reproductive cycles, diseases, sexuality, and the effects of drugs on reproduction are discussed.

A VS 108 Animal and Dairy Science Techniques 1(0,2) Basic principles in handling of livestock and techniques of animal industries are discussed. Basics of animal anatomy and equipment are used in animal production are presented.

A VS 110 Avian Pets: Biology and Owner Responsibilities 1(1,0) Systematic coverage of the many types of birds that humans keep as social companions. Nutrition, environmental considerations, reproductive habits, health, and legal and economic aspects of these pets are considered.

A VS 120 Poultry Techniques 1(0,2) Basic principles in the handling and production of poultry are discussed and demonstrated. Students receive hands-on experience and visit commercial operations to view equipment, facilities, and production techniques. Preq: Consent of instructor.

A VS 150 Introduction to Animal Science 3(3,0) Survey of animal industries and their role in society. Examines the relationship between man and animals in both a current and historical context.

A VS 151 Introduction to Animal Science Laboratory 1(0,2) Examines the basic principles in the handling of livestock and techniques of farm animal production as well as orientation to animal production units. Coreq: A VS 150.

A VS 200 Beef Cattle Techniques 1(1,2) Examines the basic principles in the techniques and management associated with production of both beef cattle and sheep. Coreq: A VS 150, 151.

A VS 201 Poultry Techniques 1(1,2) Basic principles of the production of poultry are discussed and demonstrated. Students receive hands-on experience in the production and processing of poultry. Preq: A VS 151.

A VS 202 Introductory Animal Sciences 4(4,0) Systematic coverage of the basic principles involved in breeding, feeding, management, and product marketing in beef and dairy cattle, swine, sheep, goat, horse, and poultry operations. Not open to students who have received credit for A GRIC 103.

A VS 203 Dairy Science Techniques 2(1,2) Introduction to dairy production and processing laboratories include hands-on opportunities for management of dairy cattle, quality control of milk, and processing of milk and dairy products. Preq: A VS 151.

A VS 204 Horse Care Techniques 2(1,2) Basic principles of equine behavior, handling, and management are discussed and demonstrated. Students receive hands-on experience with various management techniques including handling and all aspects of health care.

A VS 205 Horsemanship I 2(0,4) Designed for beginner to intermediate riders. The mechanics of safety, longeing, basic position, cues, and rider's aids for both western and English disciplines are covered. Preq: A VS 151.

A VS 206 Swine Techniques 2(1,2) Examines the basic principles in the techniques and management associated with production of swine. Preq: A VS 150, 151.
AVS 207 Horsemanship II 2(0,4) Designed for intermediate to advanced riders to enhance basic horsemanship and develop specific skills for advanced maneuvers in both western and English disciplines. Students concentrate on individual work and establish finesse and subtlety of aids. Training and artificial aids are discussed and/or implemented in riding sessions. Preq: AVS 205 and consent of instructor.

AVS 208 Techniques of Teaching Horsemanship 3(2,2) Discusses teaching techniques and theory and handling of large mounted groups. Trains beginner through advanced levels. Preq: AVS 205.

AVS 210 Animal Science Techniques 1(0,2) Live-stock handling techniques used in the animal industry are discussed. Principles of animal care and management for livestock production are emphasized. Preq: AVS 108.

AVS 260 Sophomore Internship 1-12(0,3-36) Off-campus, preplanned, supervised educational experience in a work environment related to animal/veterinary sciences. Students submit periodic written reports and a final written report. To be taken Pass/Fail only. Preq: Sophomore standing in a nimal and Veterinary Sciences and consent of instructor.

AVS 301 Anatomy of Domestic Animals 4(3,3) Physiology and associated anatomy of the body systems, including nervous, skeletal, muscular, respiratory, digestive, circulatory, urinary, reproductive, and endocrine systems. Designed primarily for students in Animal and Veterinary Sciences. Preq: BIOL 104 or 111.

AVS 302 Livestock Selection and Evaluation I 2(1,2) Selection and evaluation of the meat species of livestock with application of theory applied in multiple field exercises.

AVS 303 Livestock Selection and Evaluation II 2(1,2) Selection and evaluation of the meat species of livestock with application of theory applied in multiple field exercises. AVS 302.

AVS 304 Evaluation of Dairy Products 2(1,2) Emphasizes sensory evaluation of dairy products; discussion of basic principles of organoleptic evaluation, fundamental rules for scoring and grading dairy products; evaluation of all classes of dairy products based on established grades and score cards.

AVS 305 Meat Grading and Selection 2(1,2) Classification, grading, and selection of beef, lamb, and pork carcases and wholesale cuts and factors influencing quality and value are studied. Students are eligible to compete in intercollegiate meat-judging contests.

AVS 309 Principles of Equine Evaluation 2(0,4) Discusses the selection and evaluation of equines for various disciplines. Emphasis is placed on current industry standards with regard to "form to function." Students place classes of four horses and develop oral reasons to defend their placing. Opportunities for competitive horse judging teams are available.

AVS 310 Animal Health 3(3,0) Basic principles of animal health. Emphasizes disease prevention in beef cattle, dairy cattle, goats, horses, poultry, and swine. The most common and important diseases and zoonosis of farm animals are explained. Preq: AVS 150.

AVS 311 Dairy Cow Selection 2(1,2) Dairy selection and evaluation methods are studied including evaluation according to the Purebred Dairy Cow Association standards, linear evaluation, pedigrees, and Dairy Herd Improvement Association records. Emphasis is on presentation of oral reasons.

AVS 312 Forages and Grazing Systems 3(2,2) Familiarizes students with the interaction of forage plants and grazing animals. Practical application of theory is applied to management issues as it relates to the relationship between plants and animals. Preq: AVS 150, BIOL 103 or 111.

AVS 315 Animal Welfare 3(3,0) Discussion of past, present, and future human/animal interaction. Topics include wild animals, domestication, animal welfare organizations, animal rights organizations, welfare assessment, animal agriculture, animal research, and other current topics. Preq: Junior standing.

AVS 320 Veterinary and Medical Terminology 2(2,0) Promotes students' understanding and use of basic scientific and medical terminology and concepts, especially those of basic science, biology, anatomy, physiology, and medicine. Preq: BIOL 104.

AVS 323 Poultry and Poultry Products Evaluation 2(0,4) Selection of layers, broilers, and turkeys. Grading of poultry products according to USDA grade standards is also studied. Students are eligible to compete in intercollegiate poultry judging contests. May be repeated for a maximum of four credits.

AVS 330 Animal Pathology 3(3,0) A quantitates students with animal pathology including cell injury, inflammation, neoplasm, immunologic disease, and pathology of various organ systems. Preq: AVS 301.


AVS 334 Meats Laboratory 1(0,3) Selection and grading of meat carcases and carcasses. Practical work in slaughtering of animals and in the cutting, curing, and freezing of meats. Emphasis is on the identification of wholesale and retail cuts. Preq: AVS 108, 202.

AVS 360 Advanced Internship 1-12(0,3-36) Off-campus, preplanned, reviewed, approved, and supervised educational experience in an area related to animal and veterinary sciences. Based on a multifaceted work experience in a highly structured professional environment. Students submit periodic written reports and a final written and oral report. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences and consent of instructor.

AVS 370, H 370 Principles of Animal Nutrition 3(3,0) Familiarizes students with nutrients and feeds used in livestock and specialty animal production. Methods of evaluating common feedstuffs are covered along with a survey of the functioning of the various digestive systems. Practical aspect to feeding each species is covered. Preq: AVS 150, CH 102.

AVS 375, H 375 Applied Animal Nutrition 3(2,2) Students learn procedures for formulating diets that meet nutrient requirements of livestock and poultry, utilizing traditional mathematical approaches and computerized formulation. Computerized cost formulation of diets is covered along with familiarization with feeding systems and approaches. Preq: AVS 370.

AVS 385 Equine Behavior and Training 2(0,4) Introduces students to the initial processes with handling and riding young horses. Students work with two- and three-year-old horses to desensitize them to stimuli in preparation for riding. Students do groundwork and put the initial rides on the horses. Preq: AVS 205 or 207.

AVS 386 Advanced Equine Behavior and Training 2(0,4) Students train young horses advanced skills in western or English disciplines. Students actively prepare horses for show or sale and participate in a show or marketing/sale of their assigned horse. Develops students' negotiation and communication skills, industry insight, and industry-specific jargon. Preq: AVS 385.

AVS 390 Practicum 1-3(0,3-9) On-campus, preplanned, supervised learning experience in an area related to animal and veterinary sciences. Gives experience not covered in other classwork. May be repeated for a maximum of four credits. To be taken Pass/Fail only. Preq: Consent of instructor supervising practicum.

AVS 400, 600 Avian Physiology 2(2,0) Detailed study of the structure and function of organ systems of avian species with emphasis on digestion and reproduction. Students are given an opportunity to study organ system(s) of their choice using quantitative physiological techniques. Preq: AVS 201, 301, or consent of instructor.

AVS 401, H 401, 601 Beef Production 4(3,2) Discusses breeding, feeding, reproduction, and management of beef cattle. Emphasizes production systems integrating disciplines of animal agriculture into management plans and alternatives. Practical applications of beef production and management practices are also presented. Preq: AVS 202, 370.

AVS 402, 602 Poultry Management 4(3,2) Emphasizes management, decision making, and application of technology to the commercial production of poultry and poultry products.

AVS 403, 603 Laboratory Techniques 3(2,3) Research and quality control techniques commonly used in dairy science and related agrisciences. Preq: CH 102.

AVS 404, 604 Dairy Cattle Feeding and Management 4(3,2) Fundamental principles in the care, feeding, and management of dairy cattle of all ages. Topics include general consideration in selecting a breed and the individual cow, calf raising, growth and development of dairy heifers, care and maintenance of the milking herd, and feeding for milk production. Preq: AVS 202, 370.

AVS 405 Advanced Selection and Evaluation 2(0,4) Special and advanced training in selection and evaluation of breeding, performance, and market animals or their products. Species used are beef and dairy cattle, sheep, swine, and horses. Preq: AVS 302 or 303 or 304 or 305, 309 or 311 and consent of instructor.
Courses of Instruction

AVS 406 Seminars and Related Topics 2(3,0)
Students conduct in-depth library research on current topics related to animal science and give formal presentations using multimedia technology. Students also prepare scientific posters, learn interviewing skills, prepare résumés, and observe professional speakers. Preq: Senior standing.

AVS 407, 607 Equine Theriogenology 3(2,2)
Review of reproductive anatomy and physiology in the mare and stallion, induction of estrus and ovulation, practices for optimal reproductive efficiency, semen collection, preservation and transport, embryo transfer, regulatory aspects of reproduction by various breed registries, noninfectious and infectious diseases affecting reproduction, reproductive health management. Preq: AVS 453.

AVS 408, H 408, 608 Pork Production 4(3,2)
Breeding, feeding, grading, marketing, and management of swine are studied. Practical applications from all phases of the production cycle are outlined in problem form to develop students' problem-solving abilities. Preq: AVS 202, 370.

AVS 409 Selected Topics 1-3(1-3,0)
Topics of interest to students at the undergraduate, graduate, and professional levels. Provides experience with problems not covered in other courses or on thesis research. May be repeated for a maximum of six credits, but only if different topics are covered.

AVS 410, 610 Domestic Animal Behavior 3(3,0)
Provides knowledge and understanding of behavior related to perception, learning, sociality, reproduction, feeding, and health for application in production, training, and design of environments for optimum health and welfare of domestic animals. Preq: AVS 150, 151.

AVS 411, 611 Animal Growth and Development 3(3,0)
Integration of the nutritional, physiological, and genetic basis for animal growth and development with application to livestock and poultry production. Includes the cellular and molecular mechanisms controlling these processes and emphasizes the genes that regulate animal products (meat, eggs, wool, and milk). Preq: AVS 301.

AVS 412, H 412, 612 Advanced Equine Management 4(3,2)
Further discussion of special considerations of the equine regarding housing, management, nutrition, reproduction, transport, and behavior. Students gain insight into how horses differ from other livestock species and their unique requirements for the above systems. Preq: AVS 370.

AVS 413 Animal Products 3(2,3)
Introduction to the safe and humane production of red meat, poultry, and dairy products. Includes HA CCP principles and production of value-added animal products.

AVS (BIOSC, MICRO) 414, H 414, 614 Basic Immunology 4(3,3)
See MICRO 414.

AVS 415, 615 Contemporary Issues in Animal Science 3(3,0)
Provides knowledge, understanding, and critical analytical skills on current issues in animal agriculture in diverse regional, national, and global social-cultural and political environments as they impact animals and man. Preq: AVS 150, 151. Junior standing in Animal and Veterinary Sciences.

AVS 416 Equine Exercise Physiology 4(3,2)
Integration of muscle, bone, cartilage, cardiovascular, and respiratory systems as related to the equine athlete. Encompasses biomechanics, kinetics, and kinesiology related concepts specific to the horse. Further discussion of diseases related to specific systems is covered. Preq: AVS 301.

AVS 417 Animal Agribusiness Development 4(3,2)
Team-based development of a business related to the animal industries. Students develop the business from the initial idea through operations. Focuses on the development of the business plan including financials, personnel management, and resources needed. Preq: A C 201 and A P EC 202 or consent of instructor.

AVS 418, 618 Muscle Biology and Lean Meats 3(2,2)

AVS 420, 620 Poultry Science On-line 3(3,0)
Online course covering the physiology, nutrition, health, reproduction, genetics, breeding, housing, and management of commercial poultry species including the processing of meat and egg products.

AVS 422 Special Problems 1-3(0,3-9)
Laboratory, library, or field study of problems related to animal and veterinary sciences, emphasizing development and testing of hypothesis and reporting of results. May be repeated for a maximum of four credits. Preq: Junior standing and consent of instructor supervising study.

AVS 425, 625 Poultry Products Grading and Technology 3(2,3)
Factors important in the quality of poultry products are considered. Effects of production, handling, packaging, and storage on consumer acceptability are discussed. Quality evaluation is considered from the standpoint of tenderness, flavor, microbiology, and USDA grades. Preq: AVS 108, 202.

AVS 430, 630 Dairy Processing I 4(3,3)
Processing and distribution of fluid milk and other dairy products with emphasis on composition, quality control, chemical, microbiological, and public health aspects. Preq: BIOL 104, CH 102.

AVS 431, 631 Dairy Processing II 4(3,3)
Continuation of AVS 430, with emphasis on processing of cultured dairy products and frozen dairy products. Processing procedures, quality control, ingredients, formulations, and compositional and cultural characteristics of cultured and frozen dairy products are discussed. Preq: AVS 430.

AVS 441 Animal and Veterinary Sciences Teaching Experience 3(0,9)
Formal teaching experience related to animal and veterinary sciences supervised by a faculty member. May involve classroom instruction, educational material development, and/or student evaluation and assessment. Students submit periodic written reports and a final written and oral report. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences and consent of coordinating instructor.

AVS 442 A and Veterinary Sciences Extension Experience 3(0,9)
Formal experience in extension education. Students are involved in development, implementation, or assessment of adult or youth educational programs related to animal and veterinary sciences, under supervision of extension professional. Students submit periodic written reports and a final written and oral report. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences and consent of instructor.

AVS 443 AVS International Experience 1-3(0,3-9)
Prepared and approved international education/cultural experience supervised by Animal and Veterinary Sciences faculty member. Periodic reports or record keeping are required. Final report and oral presentation are required at end of experience. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences.

AVS 444 AVS Animal Agribusiness Travel Experience 2(1,2)
Classroom and travel course to expose students to animal production operations, agribusiness, and industry leaders across various geographical areas. Travel is conducted during spring break and includes visits to farms, universities, and agribusinesses. A diditional fee is required. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences, consent of instructor.

AVS 450 Animal Production Systems 4(3,2)
Critical analysis of animal production systems and associated factors. Principles of decision making, business analysis, management practices, resource assessment and allocation are covered in a variety of animal production schemes.

AVS 451, 651 Poultry Nutrition 2(2,0)
Nutritional requirements of chickens, turkeys, and game birds and methods of determining these requirements are discussed. Deficiencies and excesses of vitamins and minerals and the effects of naturally occurring toxins are considered. Formulation and linear programming are introduced.

AVS 452, 652 Poultry Nutrition Laboratory 1(0,3)
Provides training in basic laboratory skills and familiarizes students with common laboratory methods used in poultry nutrition.

AVS 453, H 453, 653 Animal Reproduction 3(2,2)
Reproductive physiology and endocrinology of mammals with emphasis on farm animals and frequent reference to reproduction in laboratory animals and humans. Preq: AVS 150, 301.

AVS 455, 655 A and Veterinary Sciences Management 1(0,3)
Physiology and endocrinology of pregnant and nonpregnant cows are discussed. Emphasizes methods of artificial insemination, pregnancy detection, and computer record keeping to achieve a high level of reproductive efficiency in cattle. Preq: AVS 150, 301; AVS 453 (or concurrent enrollment).

AVS 458, 658 Avian Microbiology and Parasitology 3(3,0)
A genus causing poultry diseases: diagnosis, prevention, and treatment of specific diseases and their economic and public health significance.

AVS 461, 661 Physiology of Lactation 2(2,0)
Anatomy and development of the mammary gland; physiological and biochemical regulation of mammary growth and milk secretion with emphasis on farm animals and reference to other mammals. Preq: AVS 202, BIO CH 305.
AVS 470, H 470, 670 Animal Genetics 3(3,0)
Fundamental principles relating to the breeding and improvement of livestock including variation, heredity, selection, line breeding, in breeding, cross breeding, and other related subjects. Preq: AVS 150.

AVS (BIO/SC) 480, 680 Vertebrate Endocrinology 3(3,0) See BIO/SC 480.

AVS 491 Animal and Veterinary Sciences Undergraduate Research Experience 3(0,9) Formal laboratory, library, or field study of problems related to animal and veterinary sciences, emphasizing hypothesis development, testing, and reporting results. Each project is preplanned, reviewed, and approved. Students submit periodic written reports and a final written and oral report. To be taken Pass/Fail only. Preq: Junior standing in Animal and Veterinary Sciences and consent of instructor.

ANTH 301 Cultural Anthropology 3(3,0)
Boone; Professor: J. M. Coggeshall; Adjunct Assistant Professors: J. M. Colacino; J. F. Barker, R. B. Norman; Visiting Mickel Associate Professor: D. J. Allison; Associate Professors: C. A. Huggins, Jr.; Associate Professor: A. H. Jacques; Assistant Professors: L. L. Higdon III, J. T. Wyffels

ANTH 301 Selected Topics 1-3(1-3,0) Comprehensive study of selected topics of interest in animal physiology not covered in other courses. May be repeated once for a maximum of six credits, but only if different topics are covered.

ANTH 351 Physical Anthropology 3(3,0)

ANTH 403, 603 Qualitative Methods 3(3,0) Methods and techniques of qualitative field research, including participant observation, ethnographic interviewing, data analysis, and report writing. Preq: ANTH 201 or consent of instructor.

ANTH (JAPN) 417 Japanese Culture and Society 3(3,0) See JAPN 417.

ANTH (CHIN) 418 Chinese Culture and Society 3(3,0) See CHIN 418.

ARCH 101 Introduction to Architecture 3(3,0) Prereq: ANTH 201 or consent of instructor.

ARCH 151 Architecture Foundations I 6(3,6) Introduction to the discipline and profession of architecture. Lectures and discussion cover a broad range of architectural issues throughout history. Emphasizes the relationship between architecture and other disciplines as well as across cultures. Includes the development of individual digital portfolio.

ARCH 152 Collaborative Studio II 3(1,6) Continuation of ARCH 151. Architectural design and problem solving with varied scales and contexts. Projects include analysis, conceptual development, and architectural resolutions. Continued development of graphic and oral communication skills. Design problems vary every semester according to current issues. May be repeated for a maximum of ten credits. Preq: ARCH 252.

ARCH 251 Architecture Foundations II 6(3,6) Continuation of ARCH 251. A design studio with a focus on structural and construction principles and their relationship to contextual situations. Instruction in oral communication skills and computer graphics support the design discussions. Preq: ARCH 151.

ARCH 352 Studio Charleston 5(1,11) A design studio with a focus on architectural problems with varied scales and programs in the context of Charleston, South Carolina. Emphasizes the relationship between architecture and context. Projects include analysis, conceptual development, and architectural resolutions. Continued development of graphic and oral communication skills. Design problems vary every semester according to current issues. May be repeated for a maximum of ten credits. Preq: ARCH 252.

ARCH 353 Studio Genoa 5(1,11) A design studio with a focus on architectural problems with varied scales and programs in the context of Genoa, Italy, and historic Europe. Emphasizes the relationship between architecture and context. Projects include analysis, conceptual development, and architectural resolutions. Design problems vary every semester according to current issues. May be repeated for a maximum of ten credits. Preq: ARCH 252.

ARCH 354 Studio Barcelona 5(1,11) A design studio with a focus on architectural problems with varied scales and programs in the context of Barcelona, Spain. Emphasizes the relationship between architecture and context. Projects include analysis, conceptual development, and architectural resolutions. Continued development of graphic and oral communication skills. Design problems vary every semester according to current issues. May be repeated for a maximum of ten credits. Preq: ARCH 252.

ARCH 355 Studio South 5(1,11) A design studio with a focus on architectural problems with varied scales and programs in the context of the South. Emphasizes the relationship between architecture, community, and context. Projects include analysis, conceptual development, and architectural resolutions. Continued development of graphic and oral communication skills. Design problems vary every semester according to current issues. May be repeated for a maximum of ten credits. Preq: ARCH 252.
ARCH 401 Architectural Portfolio II 1(1,0)
Continues portfolio development for the architect student including professional portfolio, academic portfolio, and digital portfolio. Prereq: ARCH 101. Coreq: ARCH 452, 453; Graduating Senior standing.

ARCH 403, 603 The Modern Architectural Movement 3(3,0)
Seminar in the analysis and criticism of architectural and town building works. Course sequence includes historic and contemporary examples, literary searches, field trips, essays, and oral reports. Prereq: Senior standing or consent of instructor.

ARCH 404, 604 Current Directions in Architecture 3(3,0)
Critical analysis of the development and current directions of modern movements in architecture. Prereq: Senior standing or consent of instructor.

ARCH 405, 605 American Architectural Styles 1650-1950 3(3,0)
Survey of American architectural styles and of the architects responsible for them, from the Colonial period to our recent past. Considerable emphasis is placed on identifying those architectural elements which serve as clues in determining a building's architectural style.

ARCH 412, 612 Architectural History Research 3(3,0)
Directed investigations related to the art and architectural history of Europe. May be repeated for a maximum of six credits. Prereq: Junior standing or consent of instructor.

ARCH 414, 614 Design Seminar 3(3,0)
Exploration of topical issues in architecture, art, construction, and planning. May be repeated for a maximum of six credits. Prereq: Junior standing or consent of instructor.

ARCH 415, 615 Field Sketching 3(0,6)
Study of media and techniques for expression, representation, and visual analysis through freehand perspective field drawing of the built and natural environment. Prereq: Junior standing in School of Design and Building or consent of instructor.

ARCH 416, 616 Field Studies in Architecture and Related Arts 3(0,9)
Documentation and analysis of architectural structures observed during European travels in graphic and written form. May be repeated for a maximum of six credits. Prereq: Junior standing or consent of instructor.

ARCH 421 Architectural Seminar 3(3,0)
Lectures and seminars dealing with pertinent topics related to environmental and technological considerations in architecture and the building industry. Prereq: Senior standing or consent of instructor.

ARCH 422 New Directions Seminar 3(3,0)
Exploration into careers which relate directly (i.e., construction law) or indirectly (i.e., public relations) to the making of our built environment.

ARCH 424, 624 Product Design 3(0,9)
Furniture and product system design with emphasis on ergonomics and the relationship of form and materials. Prereq: Senior standing and consent of instructor.

ARCH 425, 625 Energy in Architecture 3(3,0)
Climate design methodology and its influence on building energy patterns and architectural form. Prereq: Senior standing and consent of instructor.

ARCH 426, 626 Architectural Color Graphics 3(3,0)
Architectural color graphics by computer. Theories of color classification and interaction; application of color theories to art and architecture. Prereq: Consent of instructor.

ARCH 427, 627 Advanced Color Graphics 3(3,0)
Theories of color classification and interaction; three-dimensional color modeling by computer; advanced application of color theories to art and architecture. Prereq: ARCH 426 or consent of instructor.

ARCH 428, 628 Computer-Aided Design 3(2,3)
Introduction to the concepts, skills, and applications of computer-aided design as they relate to the practice of architecture. Prereq: Senior standing or consent of instructor.

ARCH 429, 629 Architectural Graphics 3(3,0)
Provides students with an understanding of the concepts, skills, techniques, and strategies of visual presentation/graphics as they relate to the design professions—architects/landscape architects. Prereq: Junior standing or consent of instructor.

ARCH 430, 630 Theories and Philosophies of Technology and Architecture 3(3,0)
Theoretical and practical examination of technology and architecture from pre-modern and modern viewpoints to study its nonneutral role in shaping and reflecting knowledge, beliefs, and actions within a cultural context.

ARCH 431, 631 Virtual Reality in Architecture 3(3,0)
Introduction and exploration of the theories and concepts of virtual reality and their use in modeling three-dimensional spaces. Instruction in computer modeling, lighting, and texture mapping is offered. Projects focus on the creation and presentation of a virtual environment. Prereq: Junior standing or consent of instructor.

ARCH 440 New York Field Study 3(3,0)
Study of architecture, art, planning, and urban design of New York. Two weeks of residence are required with scheduled field trips to relevant sites in all five boroughs, with counseling to determine research interests. Guidance is provided to resources in the city. A final report is required. Offered Maymester only.

ARCH 451 Architecture Studio III 6(1,11)
Continuation of ARCH 352. A diversified architectural issues of program and theory, synthesis of ideas, and self-criticism. Prereq: ARCH 352.

ARCH 452 Synthesis Studio 5(1,11)
Integrates acquired skills, abilities, and interests from previous architecture studios. Projects emphasize the accumulation of architectural experiences and knowledge. Coreq: ARCH 401, 453; Graduating Senior status.

ARCH 453 Writing Architecture 3(3,0)
Advanced writing course for architecture majors. Emphasizes synthesis of the architectural educational and development of architectural projects through writing. Prereq: Graduating Senior status. Coreq: ARCH 401, 452.

ARCH 485, 685 Health Care Facilities Programming 3(3,0)
Seminar on recent research and innovations in health-care facilities programming and original investigation of assigned programming problems. Prereq: Consent of instructor.

ARCH 490, H490 Directed Studies 1-5
Comprehensive studies and research of special topics not covered in other courses. Emphasis is on field studies, research activities, and current developments in architecture. May be repeated for a maximum of ten credits. Prereq: Consent of department chair.

ARCH 499, H499 Selected Topics in Architecture 3-12(3,0)
Study of selected topics in architecture. May be repeated for a maximum of nine credits, but only if different topics are covered. Prereq: Junior standing or consent of instructor.

ARCH 557 Architecture Studio 6(0,18)
City planning design and the development of complex building solutions.

ART

ART 103 Visual Arts Studio 3(0,6)
Studio projects in basic visual elements and principles. The development of creative design processes, visual organization, and design skills are introduced as a foundation for further study in visual arts.

ART 151 Foundations in 2-D Art 3(0,6)
Intensive introduction to the visual arts and design fundamentals including the exploration of the history and practical applications of the elements and principles of design as they relate to two-dimensional art work. Prereq: Visual Arts major.

ART 152 Foundations in 3-D Art 3(0,6)
Intensive introduction to the visual arts and design fundamentals, including the exploration of the history and practical applications of elements and principles of design as they relate to three-dimensional art work. Prereq: Visual Arts major.

ART 153 Orientation to Visual Arts 1(1,0)
Introduction to the visual arts profession focusing on issues related to various career opportunities, creativity, problem-solving methodologies, and current thinking in contemporary art. Prereq: Visual Arts major.

ART 154 Orientation to Visual Arts 1(1,0)
Introduction of professional practices related to the visual arts. Addresses issues related to the development and documentation of professional activities in the various studio disciplines as well as health and safety concerns for the studio artist. Prereq: Visual Arts major.

ART 205 Beginning Drawing 3(0,6)
Study of drawing based on the premise that drawing is a foundation discipline in the visual arts. Basic materials and approaches associated with drawing are studied and applied through studio practice, augmented by critiques, demonstrations, and lectures. Prereq: ART 103 (non-Art majors); ARCH 152 (Architecture majors); LA ARCH 152 (Landscape Architecture majors); or consent of instructor.
ART 207 Beginning Painting 3(0,6) Introduction to basic materials, methods, and techniques of painting. Primary medium used is acrylic, and other painting media may also be introduced. Emphasis is on basic skills in painting plus individual creative development. Prereq: A RT 151, 152, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); L A R C H 152; or consent of instructor.

ART 209 Beginning Sculpture 3(0,6) Studio course investigating the meaning of sculpture through traditional and nontraditional approaches. Establishes a working knowledge of material and process in several media. Personal expression is encouraged and enhanced by employment of problem-solving techniques. Static, temporal, installation, and site specific sculpture is explored. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 211 Beginning Printmaking 3(0,6) Studio course introducing basic techniques of relief printing, intaglio, lithography, silkscreen, and papermaking. Each semester concentrates on two or three of these techniques. Coursework integrates print-making processes and creativity. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 213 Beginning Photography 3(0,6) Introduction to the use of photography as an art medium. Lectures and studio work cover the utilization of the camera, processing, and printing in black and white, with emphasis on perception and creative expression. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 215 Beginning Ceramics 3(0,6) Basic studio course introducing ceramic arts through its various processes and techniques. H and building methods as well as throwing on the potter's wheel are developed. Weekly project emphasizes imagination, self-expression, and skill development. Ceramic history is introduced through slide lectures. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 219 Beginning Papermaking 3(0,6) Explores paper, not just as a surface to receive an image, but as a material capable of being an artistic expression in and of itself. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 223 Woodworking Studio 3(0,6) Introduces woodworking explorations in sculpture and furniture design with emphasis on technical understanding and creative application of woodworking processes and methodologies. Students experiment with wood as a vehicle for personal and expressive work in woodworking. Prereq: A RT 151, A RT 152 or A R C H 152, L A R C H 152, or consent of instructor.

ART 305 Drawing 3(0,6) Study of human figure drawing with primary emphasis on drawing from live models. Student's drawing skills and fundamental understanding of the structure and form of the human figure are reviewed through studio practice, augmented by critiques, demonstrations, and lectures. Prereq: A RT 205 or consent of instructor.

ART 307 Painting 3(0,6) Continuation of A RT 209 with increased emphasis on personal expression and growth in technical competence. Some study of painting history is included in studio activity. Prereq: A RT 207 or consent of instructor.

ART 308 Painting Research I 1-3(0,2-6) Continuation of A RT 307. Technical and conceptual research in painting to further develop self-expression. Special projects are developed during consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 307 or consent of instructor.

ART 309 Sculpture 3(0,6) Continuation of A RT 209 with increased emphasis on personal expression and content of work. Further exploration of materials and processes including an introduction to foundry casting and advanced welding techniques. Individual investigation into current and historical aspects of sculpture is required. Prereq: A RT 209 or consent of instructor.

ART 310 Sculpture Research I 1-3(0,2-6) Continuation of A RT 309. Technical and conceptual research in sculpture to further develop self-expression. Special projects are developed in consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 309 or consent of instructor.

ART 311 Printmaking 3(0,6) Continuation of processes in beginning printmaking with emphasis on expanding the range and depth of technique. The relationship of technique and process to creative idea development is emphasized. Prereq: A RT 211 or consent of instructor.

ART 312 Printmaking Research I 1-3(0,2-6) Continuation of A RT 311. Technical and conceptual research in printmaking to develop self-expression. Special projects are constructed in consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 311 or consent of instructor.

ART 313 Photography 3(0,6) Continuation of A RT 213. A dvanced techniques and more diverse types of film and paper are used in making images of personal and expressive nature. The design and construction of a view camera, printing in color, and multiple imagery may also be included. Prereq: A RT 213 or consent of instructor.

ART 314 Photography Research I 1-3(0,2-6) Continuation of A RT 313. Technical and conceptual research to develop personal and expressive work in photography. Projects are chosen in consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 313 or consent of instructor.

ART 315 Graphic Design 3(0,6) Continuation of concepts and techniques introduced in A RT 215 with emphasis on more applied projects. Individual creative solutions are emphasized. Prereq: A RT 215 or consent of instructor.

ART 317 Ceramic Arts 3(0,6) Continuation of skill development leading to more challenging projects and independent efforts. Further exposure to ceramic history and ceramic technology is presented. Prereq: A RT 217 or consent of instructor.

ART 318 Ceramics Research I 1-3(0,2-6) Continuation of A RT 317. Technical and conceptual research in ceramics for the purpose of self-expression. Projects are constructed in consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 317 or consent of instructor.

ART 321 Art with the Computer 3(0,6) Studio course using the microcomputer as an art medium. Studies in imaging systems, with emphasis on the creative use of the medium for artistic expression. Prereq: A RT 151, 152, 153, 154, 205 (Visual Arts majors); A RT 103 (non-Art majors); A R C H 152 (Architecture majors); L A R C H 152 (Landscape Architecture majors); or consent of instructor.

ART 322 Art with the Computer Research I 1-3(0,2-6) Continuation of A RT 321. Technical and conceptual research to develop personal and expressive work in computer imaging. Projects are chosen in consultation with instructor. May be repeated for a maximum of five credits. Prereq: A RT 321 or consent of instructor.

ART 405, 605 A dvanced Drawing 3(0,6) A dvanced level studies of drawing which explore the synthesis of refined drawing skills and philosophies of art. Students' understanding of drawing as a form of art is developed through studio practice augmented by critiques, demonstrations, lectures, field trips, and independent research. Prereq: A RT 305 or consent of instructor.

ART 407, 607 A dvanced Painting 3(0,6) A dvanced studio course in painting. Students select painting media and develop a strong direction based on prior painting experience. Study of contemporary painters and directions is included. Prereq: A RT 307 or consent of instructor.

ART 409, 609 A dvanced Sculpture 3(0,6) Intensive independent studio concentration to further develop personal direction and content. Continued investigation of sculptural context, materials and processes, and relative historical research is emphasized. Prereq: A RT 309 or consent of instructor.
ART 411, 611 Advanced Printmaking 3(0,6)
Culmination of process, techniques, and individual development. Students are expected to have mastered process and technique for the benefit of the image produced. Creativity and self-expression are highly emphasized as students select a process for concentrated study. Preq: A RT 311 or consent of instructor.

ART 412, 613 Advanced Photography 3(0,6)
Continuation of A RT 312. A dvanced problems in photography. Preq: A RT 313 or consent of instructor.

ART 415 Advanced Graphic Design 3(0,6)
Continuation of A RT 315. Personal expression through communication techniques is further explored. Individual projects are emphasized. Preq: A RT 315 or consent of instructor.

ART 417, 617 Advanced Ceramic Arts 3(0,6)
Students are directed toward further development of ideas and skills. Glaze calculation and firing processes are incorporated to allow for a dynamic integration of form and ideas. Preq: A RT 317 or consent of instructor.

ART 418 Ceramics Research II 1-3(0,2-6)
Continuation of A RT 417. Technical and conceptual research in ceramics for the purpose of self-expression. Projects are chosen in consultation with instructor. May be repeated for a maximum of five credits. Preq: A RT 417 or consent of instructor.

ART 420, 620 Selected Topics in Art 1-3(0,6-9)
Intense course in studio art. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Senior standing or consent of instructor.

ART 471 Bachelor of Fine Arts Senior Studio I 3(0,6)
Individual studio project directed by an instructor and determined by the student in consultation with the instructor. Focuses on a particular studio area, concept, or theme. May be repeated for a maximum of six credits. Preq: Senior standing and completion of 300/400 sequence in the chosen studio area, minimum grade-point ratio of 3.0 in focus studio area, participation in senior studio interview. Coreq: A RT 473.

ART 472 Bachelor of Fine Arts Senior Studio II 5(0,15)
Individual studio project directed by an instructor and determined by the student in consultation with the instructor. Usually focuses upon a particular studio area, concept, or theme. Preq: A RT 471 with a B or better.

ART 473 Senior Seminar in Professional Career Preparation 2(2,0)
Seminar and practical guide to prepare students for entry into the professional art world. Focuses on issues concerning visual artists in the early years of their professional activities. Presents career options and practical information for the graduating senior, including portfolio development. Coreq: A RT 471.

ART 490, H 490, 690 Directed Studies 1-5(0,2-10)
Study of areas in the visual arts not included in other courses or additional advanced work. Must be arranged with a specific instructor prior to registration. May be repeated for a maximum of 18 credits. Preq: Consent of instructor.

A R T A N D A R C H I T E C T U R A L H I S T O R Y
Professor: W. W. Lew; Associate Professors: A. V. Feese; J. B. LeBlanc; A sistant Professor: K. Kourousis

A H 101, H 101 Survey of Art and Architecture I 3(3,0)
Comprehensive survey of art and architectural history of Western heritage as well as significant coverage of Asian, African, Native American, and South American arts. The arts are studied within the contexts of history, geography, politics, religion, and culture. Survey includes a ncient through Gothic. Preq: A H 101.

A H 203, H 203 History and Theory of Architecture II 3(3,0)
First of a two-semester sequence of special topics and issues in the history of architecture. Emphasis is on architectural theory and practice in the past and present. A nalysis of different approaches to architecture: historical, typological, aesthetic, phenomenological. Preq: A H 102.

A H 204, H 204 History and Theory of Architecture II 3(3,0)

A H 205, H 205 History and Theory of Art I 3(3,0)
First of a two-semester sequence on special topics and issues in the history of art. Emphasis is on stylistic developments and specific art movements. A nalysis of art within the larger context of social, political, and religious history. Examination of art techniques and theory as they have developed. Preq: A H 102.

A H 206, H 206 History and Theory of Art II 3(3,0)
Second of a two-semester sequence on special topics and issues in the history of art. Continued emphasis on stylistic developments and art movements, with specific attention directed toward the Renaissance art. A nalysis of the influence of past history on modern. Preq: A H 205.

A H 210, H 210 Introduction to Art and Architecture 3(3,0)
One-semester lecture survey that introduces to the nonmajor an overview of art and architecture from different time periods and cultures. Students are encouraged to appreciate the contribution to art made by the great masters and to discern different styles, art techniques, and creative traditions.

A H 305 Contemporary Art History II 3(3,0)
Study of contemporary art from World War II to the present, exploring forces that have shaped various movements and directions. Preq: A H 206.

A H 330 Honors Colloquium 3 Undergraduate honors colloquium with emphasis on interdisciplinary interpretations. A n integration of art, architecture, landscape, and city planning. Preq: A H 204 or 206 or consent of instructor.

A H 391 Italian Studies Abroad I 3-6(3-6,0)
On-site exposure of specific works of art and architectural monuments in Italy, coupled with lectures and study problems. May be taught alternately as a compact short course during the academic year with a short stay in Italy or during the summer with an extended foreign experience. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 392 British Studies Abroad I 3(3,0)
On-site exposure to specific works of art and architectural monuments in Great Britain, coupled with lectures and study problems. May be taught alternately as a compact short course during the academic year with a short stay in Britain or during the summer with an extended foreign experience. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 393 French Studies Abroad I 3(3,0)
On-site exposure to specific works of art and architectural monuments in France, coupled with lectures and study problems. May be taught alternately as a compact short course during the academic year with a short stay in France or during the summer with an extended foreign experience. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 394 Northern European Visual Studies Abroad I 3(3,0)
On-site exposure to art and architecture in Northern European countries such as Belgium, Germany, and Holland, coupled with lectures and study problems. May be taught alternately as a compact course during academic year with short stay in Northern Europe during summer with extended foreign experience. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 395 Special Topics in Visual Studies Abroad I 3(3,0)
On-site exposure to art and architecture in foreign countries, coupled with lectures and study problems. Different countries may be selected for study at faculty discretion. May be taught as a compact course during academic year with short stay in foreign country or during summer with extended foreign experience. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 396 Special Topics in Visual American Studies 3(3,0)
On-site exposure to specific works of art and architectural monuments throughout the United States, coupled with lectures and study problems. May be taught alternately as a compact short course during the academic year with a short trip to areas of interest or during the summer with extended travel. May not be taken Pass/Fail. Preq: A H 204 or 206 or consent of instructor.

A H 411, 611 Directed Research in Art History 3(3,0)
Comprehensive studies and research of special topics not covered in other courses. Emphasis is on field studies, research activities, and current developments in art history.

A H 412, 612 Directed Research in Art History II 3(3,0)
Continuation of A H 411.
A A H 423, 623 Studies in the Art and Architecture of the Renaissance I 3(3,0) Consideration of the visual arts and architectural monuments of the Renaissance (Western Europe from the 15th–16th centuries), with a study in depth of selected examples from the period. Preq: A A H 204 or 206 or consent of instructor.

A A H 424, 624 Studies in the Art and Architecture of the Renaissance II 3(3,0) Consideration of the visual arts and architectural monuments of the Renaissance (Western Europe from the 15th–16th centuries), with a study in depth of selected examples from the period. Preq: A A H 423.

A A H 428, 628 Nineteenth Century Visual Arts 3(3,0) Consideration of the visual arts of the 19th century; painting, sculpture, printmaking, ceramics, and so forth, in relation to the factors that have influenced the artist and the consequence on society. Preq: A A H 427.

A A H 429 Studies in the Art and Architecture of India and the Far East 3(3,0) Consideration of the visual arts and architectural monuments of India and the Far East, with a study in depth of selected examples from the period. Preq: A A H 204 or 206 or consent of instructor.

A A H 430, 630 Twentieth Century Art I 3(3,0) A survey of students with the major artists’ monuments and issues of the Modern period in art. Through lecture/discussions and the reading of primary sources, course places the major modern movements in the context of the period (1860s–1945). Preq: Consent of instructor.

A A H 431, 631 Twentieth Century Art II 3(3,0) Overview of trends in art and architecture since World War II. Specific artists, artworks, and movements are presented in a socio/historic context with specific emphasis on the transition from a late-modernist to a post-modern perspective. Preq: Consent of instructor.

A A H 432, 632 Twentieth Century Art III 3(3,0) A survey of students with the major artists’ monuments and issues of the Modern period in art. Through lecture/discussions and the reading of primary sources, course places the major modern movements in the context of the period (1860s–1945). Preq: Consent of instructor.

A L 349 Principles of Coaching I 3(3,0) Investigation into the scientific basis of the coaching profession, middle and high school levels. Topics include developing a coaching philosophy, sport psychology, sport pedagogy, sport physiology, athletic administration, and risk management. Current issues regarding sportsmanship, gender equity, compliance, and cultural diversity are researched and synthesized. Preq: Athletic Leadership minor or consent of Athletic Leadership coordinator.

A L 350 Scientific Basis of Coaching I: Exercise Physiology 3(3,0) Increases understanding of basic scientific information concerning athletic performance by using the conceptual approach. In-depth investigation into the physiological principles that can enhance athletic performance is the primary focus. Phases of physical training as well as comprehensive evaluative techniques are included. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 352 Scientific Basis of Coaching II: Kinesiology 3(3,0) Increases understanding of basic scientific information concerning athletic movement by utilizing the conceptual approach. Deals with the basic laws of human motion necessary in evaluation of athletic movement, utilizing joint structure and anatomic landmarks as a basis for motion. Preq: A L 349.

A L 353 Theory of Prevention and Treatment of Athletic Injuries 3(2,3) Increases understanding of principles involved in the prevention and treatment of athletic injuries. Deals with basic anatomy, first aid, and diagnostic techniques necessary for the understanding of basic athletic training procedures. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 361 Administration and Organization of Athletic Programs 3(3,0) Study of modern techniques and practices used in administering athletic programs. Major emphasis areas such as practice and game organization, purchase and care of equipment, budget and finances, public relations, and legal liability in athletic programs are presented. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 362 Psychology of Coaching 3(3,0) Study of psychological techniques utilized to promote maximum athletic performance. A reas on emphases includes motivation, coaching philosophy, athletic personality, mental preparation, and goal-oriented behavior. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 371 Coaching Baseball 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of baseball by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 372 Coaching Basketball 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of basketball by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.
A L 374 Coaching Football 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of football by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 375 Coaching Soccer 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of soccer by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 376 Coaching Strength and Conditioning 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of strength and conditioning by utilizing the conceptual approach. Students study basic principles of coaching, training programs, and equipment appraisal as a means to improve athletic performance. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 377 Coaching Track and Field 1(0,3) Increases understanding of basic technical and practical information concerning the coaching of track and field by utilizing the conceptual approach. Students study basic principles of coaching, competitive organization, and proper technical skills needed to improve athletic performances. Total program development is also covered as it pertains to specific levels of competition. Preq: A L 349 or consent of Athletic Leadership coordinator.

A L 400 Athletic Leadership Internship 0 Athletic coaching and administration internship for a minimum of 60 hours. To be taken concurrently with any other Clemson University course. To be taken Pass/Fail only. Preq: Current CPR certification and consent of Athletic Leadership coordinator.

A L 453, 653 Athletic Injuries: Prevention, Assessment and Rehabilitation 3(3,0) Gives students an understanding of prevention, treatment, and rehabilitation procedures of injured athletes. Preq: A L 349.