805. Integrated Pest Management Systems
Fall, Spring: 3(1-2)
Biological, ecological and sociological factors which can be exploited for integrated pest management. Design and management of environmental systems for pest prevention and non-chemical control.

812. Graduate Seminar
Fall, Spring: 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Current research topics. Student presentation required.

815. Insect Behavior
Fall of even-numbered years: 3(1-3)
P: ENT 404. Fundamentals of insect behavior with emphasis on mechanisms. Quantitative methods.

815. Insect Behavior
Fall of odd-numbered years: 3(1-3)
P: ENT 404. Fundamentals of insect behavior with emphasis on mechanisms. Quantitative methods.

818. Systematics, Morphology, Biology: Adults
Spring of odd-numbered years: 3(1-7)

838. Systematics, Morphology, Biology: Immatures
Fall of even-numbered years: 3(1-7)

844. Insect Ecology and Evolution
Spring of even-numbered years: 3(3-0)
P: ENT 404. Unique characteristics and principles of insect ecology and evolution including trophic relationships, community structure, speciation and coevolution.

850. Insect Physiology
Spring of even-numbered years: 4(3-12)
P: ENT 404. System by system description of insect form and function. Examples of how physiological systems are coordinated for complex biological functions.

851. Molecular Entomology
Fall of odd-numbered years: 3(3-0) Interdepartmental with Genetics. Analysis of molecular processes unique to insects, and their potentials for genetic engineering.

870. Plant Nematology
Spring of odd-numbered years: 3(2-13) Interdepartmental with Botany and Plant Pathology. P: BOT 405. Biology, host-parasite relationships and management of selected nematode diseases of economic plants.

880. Independent Study
Fall, Spring, Summer: 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to graduate students. Individual study on a field or laboratory research topic or review of published literature on a topic of interest.

899. Master's Thesis Research
Fall, Spring: 1 to 12 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open only to masters students in Entomology.

905. Analytical Techniques for Bioactive Compounds: Separation
Spring of even-numbered years: 4(2-16) Extraction and chromatographic separations of compounds from environmental matrices.

910. Analytical Techniques for Bioactive Compounds: Confirmation
Spring of odd-numbered years: 4(2-16) Instrumental confirmation of compounds from environmental matrices.

999. Doctoral Dissertation Research
Fall, Spring, Summer: 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to Ph.D. students in Entomology.

ENVIRONMENTAL ENGINEERING

Department of Civil and Environmental Engineering
College of Engineering

800. Environmental Engineering Seminar
Fall, Spring: 1(1-0) R: Open only to Environmental Engineering majors. Current research in environmental engineering.

801. Dynamics of Environmental Systems
Spring: 3(3-0)
Principles of mass balance, reaction kinetics, mass transfer, reactor theory in environmental engineering.

802. Physicochemical Processes in Environmental Engineering
Fall: 3(3-0)
P: ENE 801. Physical and chemical principles of air and water pollution control and environmental contaminants in water, air and soils.

803. Physicochemical Process Laboratory
Spring: 1(0-3)
P: ENE 801. C: ENE 802. Experiments involving physicochemical processes such as air stripping, coagulation and flocculation, activated carbon and chemical oxidation.

804. Biological Processes in Environmental Engineering
Fall: 3(3-0)
P: ENE 801 or concurrently. Engineering of microbial processes used in wastewater treatment, in-situ bioreclamation, and solid waste stabilization.

805. Biological Processes Laboratory
Spring: 1(0-4)

807. Environmental Analytical Chemistry
Fall: 3(3-0) R: Open only to Environmental Engineering majors. Techniques for measurement and analysis in environmental engineering. Sample preparation. Quality assurance.

808. Environmental Analytical Chemistry Laboratory
Spring: 1(0-4)
P: ENE 806. R: Open only to Environmental Engineering majors. Laboratory work in environmental analytical chemistry.

880. Independent Study in Environmental Engineering
Fall, Spring, Summer: 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to Environmental Engineering majors. Solution of environmental engineering problems not related to student's thesis.

890. Selected Topics in Environmental Engineering
Fall, Spring, Summer: 3(0-3) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to Environmental Engineering majors. Selected topics in new or developing areas of environmental engineering.

899. Doctoral Dissertation Research
Fall, Spring, Summer: 1 to 24 credits. A student may earn a maximum of 72 credits in all enrollments for this course.

FAMILY AND CHILD ECOLOGY

Department of Family and Child Ecology
College of Human Ecology

145. The Individual, Marriage and the Family
Fall, Spring: 3(3-0) R: Open only to freshmen and sophomores. Development of the young adult in the human ecological context. Issues of sexuality, gender, parenting, work and family interaction, communication and resource use. Diversity in relationships and families.

211. Child Growth and Development: Conception Through Early Childhood
Fall, Spring: 3(3-2) R: Not open to freshmen. Physical, cognitive, social, emotional and ecological aspects of human growth and development from conception through early childhood.

212. Children, Youth and Family
Fall, Spring: 3(3-0) P: FCE 145, SOC 100 or FCE 211. R: Not open to freshmen. An ecosystems perspective on development during childhood and adolescence emphasizing family and community contexts.

225. Ecology of Family and Human Development
Fall, Spring: 3(3-0) R: Not open to seniors except seniors in the College of Human Ecology. Human development across the lifespan with an ecological perspective. Relationships between human resource professionals and family systems.

230. Personal Finance
Fall, Spring, Summer: 3(3-0) Strategies, techniques and resources useful in the management of personal finance.

QA: FCE 238

QA: ENE 809

QA: ENE 899

QA: ENE 899

QA: ENE 899