

Descriptions — Entomology of Courses

870. Plant Nematology
Spring of odd-numbered years. 3(2-3) Interde-
partmental with Botany and Plant Pathology.
P: BOT 405.

Biology, host parasite relationships and management
of selected nematode diseases of economic plants.

890. 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 Theses Research
Fall, Spring, Summer. 1 to 12 credits. A stu-
dent may earn a maximum of 24 credits in all enroll-
ments for this course.

R: Open only to masters students in Entomology.

**940. Analytical Techniques for Bioactive
Compounds: Separation**
Spring of odd-numbered years. 4(2-6)
Extraction and chromatographic separations of com-
pounds from environmental matrices.

**941. Analytical Techniques for Bioactive
Compounds: Confirmation**
Spring of even-numbered years. 4(2-6)
Instrumental confirmation of compounds from envi-
ronmental matrices.

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 12 credits. A stu-
dent may earn a maximum of 99 credits in all enroll-
ments for this course.

R: Open only to Ph.D. students in Entomology.

ENVIRONMENTAL ENGINEERING

ENE

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 pol-
lution 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 sta-
bilization.

805. Biological Processes Laboratory
Spring. 1(0-4)
P: ENE 804.
Principles of biological processes applied to wastewater
treatment.

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

**808. Environmental Analytical Chemistry
Laboratory**
Spring. 1(0-3)
P: ENE 807. R: Open only to Environmental Engineer-
ing majors.
Laboratory work in environmental analytical chemis-
try.

**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(3-0) 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 environ-
mental engineering.

899. Master's Thesis Research
Fall, Spring, Summer. 1 to 8 credits. A student
may earn a maximum of 24 credits in all enrollments
for this course.

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A stu-
dent may earn a maximum of 72 credits in all enroll-
ments for this course.

FAMILY AND CHILD ECOLOGY

FCE

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 ecologi-
cal context. Issues of sexuality, gener, parenting, work
and family interface, communication and resource use.
Diversity in relationships and families.

**211. Child Growth and Development:
Conception Through Early Childhood**
Fall, Spring. 3(3-0)
R: Not open to freshmen.
Physical, cognitive, social, emotional and ecological
aspects of human growth and development from con-
ception through early childhood.

**211L. Child Growth and Development
Laboratory**
Fall, Spring. 1(0-3)
C: FCE 211. R: Not open to freshmen.
Observation and recording the behavior and develop-
ment of young children.

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 eco-
logical perspective. Relationships between human re-
source professionals and family systems.

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

270. Human Services in the Community
Fall, Spring. 4(3-2)
R: Not open to freshmen. Open only to students in the
Department of Family and Child Ecology.
Human services from an ecological perspective. Hu-
man service needs, resources and methods of service
delivery. Participation in community agency required.

**320. Interaction Processes with Children in
Groups**
Fall, Spring. 3(3-0)
P: FCE 211. R: Open only to juniors and seniors in the
Department of Family and Child Ecology.
Principles of verbal and non-verbal interaction in re-
lation to children's behavior in groups. Focus on young
children in early childhood programs.

320L. Interaction with Children-Laboratory
Fall, Spring. 1(0-3)
P: FCE 211; FCE 320 or concurrently. R: Open only to
juniors and seniors in the Department of Family and
Child Ecology.
Practice applying principles of interaction to individu-
als and small groups in early childhood programs.

**321. Curriculum for Early Childhood
Programs**
Fall, Spring. 3(3-0)
P: FCE 320, FCE 320L. R: Open only to juniors and
seniors in the Department of Family and Child Ecology.
Completion of Tier I writing requirement.
Child development principles and accreditation stand-
ards for designing curricula for early childhood pro-
grams. Planning and evaluating learning activities and
programs.

**321L. Curriculum for Early Childhood
Programs: Laboratory**
Fall, Spring. 1(0-3)
P: FCE 320, FCE 320L, FCE 321 or concurrently. R:
Open only to juniors and seniors in the Department of
Family and Child Ecology.
Supervised practice in providing learning activities for
individual children and small groups. Planning, imple-
menting and evaluating activities.

**350. Management and Decision Making in
the Family**
Fall. 3(3-0)
R: Not open to freshmen and sophomores. Completion
of Tier I writing requirement.
Management for the realization of values and goals
through decision making about resources in the family.