ENVIRONMENTAL ENGINEERING ENE

Department of Civil and Environmental Engineering
College of Engineering

899. Master's Thesis Research
Fall, Spring, Summer. 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.

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

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

999. Doctoral Dissertation Research
Fall, Summer. 1 to 12 credits. A student may earn a maximum of 59 credits in all enrollments for this course. R: Open only to Ph.D. students in Entomology.

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(0-0)
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 interface, communication and resource use. Diversity in relationships and families.

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

211L. Child Growth and Development Laboratory
Fall, Spring. 1 credit. C: FCE 211 concurrently. R: Not open to freshmen. Observation and recording the behavior and development of young children.

212. Children, Youth and Family
Fall, Spring. 3(0-3)
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 Lifespan Human Development in the Family
Fall, Spring. 3(0-0)
Human development across the lifespan with an ecological perspective. Relationships between human resource professionals and family systems.

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

320. Interaction Processes with Children in Groups
Fall, Spring. 3(0-0)
P: FCE 311, FCE 311L. R: Open only to seniors in the Department of Family and Child Ecology. Principles of verbal and non-verbal interaction in relation to children’s behavior in groups. Focus on young children in early childhood programs.

320L. Interaction with Children-Laboratory
Fall, Spring. 1 credit. P: FCE 311, FCE 311L; FCE 320 or concurrently. R: Open only to seniors in the Department of Family and Child Ecology. Practice applying principles of interaction with individuals and small groups in early childhood programs.

321. Curriculum for Early Childhood Programs
Fall, Spring. 3(0-0)
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 standards for designing curricula for early childhood programs. Planning and evaluating learning activities and programs.

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

345. Principles of Family Studies
Fall, Spring. 3(0-0)
P: FCE 325 R: Not open to freshmen. Historical, social, cultural and economic perspectives on contemporary families. Approaches to studying families. Role of communication, resources and decision making in family systems.

346. Helping Skills in Family Community Services
Fall, Summer. 3(0-2)
P: FCE 320, FCE 320L. Foundational skill development necessary for the delivery of services to diverse families, including communicating, interviewing, problem solving, and assessment. Application of skills in a field experience.
347. **Programming in Family Community Services**
   Fall, Summer. 4(3-3)
   P: FCE 270; FCE 280 or FY 270 or SOC 361. R: Not open to freshmen. Not open to students with credit in FCE 370.
   Analysis of youth and adult service programs. Program planning processes involved in delivering services to clients and learners. Application of program planning skills. Field experience.

350. **Management and Decision Making in the Family**
   Fall, 3(0-0)
   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.

370. **Educational Systems in Human Ecology**
   Fall, Spring, 3(2-2)
   P: FCE 270. R: Not open to freshmen. Completion of Tier I writing requirement. The human ecologist as educator in formal, nonformal, and informal educational systems. Instructional methods appropriate for those environments.

405. **Work and Family**
   Spring, 3(0-0)
   R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Historical perspectives on work and family. Effects of work on family members across life cycle, and employer and public policy response.

411. **Developmental Study of a Child**
   Fall, Spring, 2(1-1)
   P: FCE 211 or PSY 244. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Ecological analysis of developmental behavior. Application of research findings to observations of a child.

413. **Adult Development and the Family: Middle and Later Years**
   Spring, Summer. 4(3-3)
   P: One course in psychology or sociology. R: Not open to freshmen and sophomores. Social, psychological and biological development within the family. Field study approach.

414. **Parenting**
   Fall of odd-numbered years. 3(3-0)

424. **Student Teaching in an Early Childhood Program**
   Fall, Spring, Summer. 6 to 8 credits.
   P: FCE 321, FCE 321L. R: Open only to seniors or graduate students in Child Development, Child Development and Teaching, Community Services or Family and Child Ecology. Completion of Tier I writing requirement. Approval of department. A supervised teaching practicum. Planning, implementing, and evaluating an ecological, educational program for children and their families.

441. **Home Economics Education Programs**
   Fall, 2(2-0)
   R: Not open to freshmen and sophomores. Types, functions, and purposes of various home economics education programs, and occupational issues.

442. **Ethnic Minority Families in America**
   Fall, Spring, 3(0-0)
   R: Not open to freshmen and sophomores. Historical, structural, and functional components of selected ethnic minority family systems in America. Life styles, pressures, adaptations, viability, and continuity.

444. **Interpersonal Relationships in the Family**
   Fall, Spring, 3(3-0)
   R: Not open to freshmen and sophomores. Personal awareness and interpersonal relationships within the family system. Small group discussions.

445. **Human Sexuality**
   Fall, Spring, 3(0-0)
   R: Not open to freshmen and sophomores. Family and psychosocial factors affecting the development of a person's sexuality across the life cycle. Reciprocal impact on society and the legal system.

447. **Management of Family Community Service Programs**
   Spring, Summer. 4(4-0)
   P: FCE 321 or FCE 347. R: Open only to juniors or seniors or graduate students in the Department of Family and Child Ecology. Analysis of family and community service programs and organizations. Effective management and leadership processes. Programs and organizations from an ecological perspective. Service learning experience.

452. **Consumer Issues**
   Spring, 3(3-0)
   P: FCE 228 or approval of department. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Issues in contemporary consumer ecosystems.

454. **Family Financial Management**
   Fall, 3(3-0)
   P: FCE 228 or approval of department. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Financial management strategies of families during the life cycle. Income support programs.

458. **Family Financial Advising**
   Spring of odd-numbered years. 2(2-0)
   P: FCE 454 or concurrently. R: Not open to freshmen and sophomores. Advising strategies for working with families with financial concerns.

470. **Current Issues in Family and Child Ecology**
   Spring, 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to freshmen and sophomores. Legislation, current events, and issues affecting families and children. Implications for professional decisions and actions.

472. **Evaluation of Human Service Programs**
   Spring, Summer. 3(2-2)
   P: FCE 370. R: Not open to freshmen and sophomores. Evaluation design, methodology and implementation, with applications to family, child, consumer, and human service related programs. Interactions of individuals, families and human service programs from a perspective of the ecology of human development, family ecosystems, and community ecology.

473. **Administration of Early Childhood Programs**
   Spring, 3(3-0)
   P: FCE 321 or FCE 347 or FCE 370. R: Open only to juniors or seniors or graduate students in the Department of Family and Child Ecology. Not open to students with credit in FCE 447. Administrator's role in early childhood programs. Ecological focus on administrative relationships, regulations, fiscal and management skills, and developmentally appropriate practices. Public, private, for-profit, not-for-profit, center, and home-based programs.

490. **Independent Study**
   Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to freshmen and sophomores. Approval of instructor; application required. Individual study of selected topics under faculty guidance.

490H. **Honors Independent Study**
   Fall, Spring, Summer, 1 to 5 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to freshmen and sophomores. Open only to honors students. Approval of instructor; application required. Honors individual study of selected topics with faculty guidance.

492. **Internship Seminar**
   Fall, Spring, 2(2-0)
   P: FCE 370. R: Open only to juniors or seniors in the Department of Family and Child Ecology. Approval of department. Preparation for professional internship.

493. **Internship**
   Fall, Spring, Summer. 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P: FCE 492. R: Open only to seniors in the Department of Family and Child Ecology. Completion of Tier I writing requirement. Approval of department. Professional experience in a community organization.

801. **Family Ecosystems**
   Fall, Spring, 3(3-0)
   Family viewed from ecosystems perspective. Assessment tools used to analyze family systems.

810. **Theories of Human Development**
   Fall, 3(3-0)
   Major theories of development; research findings and the validity of theoretical positions.

811. **Child Development: Ecological Perspectives**
   Fall of even-numbered years. 3(3-0)
   Ecological factors that influence family functioning and child outcomes.

812. **Adolescence in the Family: Ecological Perspectives**
   Spring of even-numbered years. 3(3-0)
   Ecological factors that influence family functioning and adolescent outcomes.

813. **Adulthood and Aging in the Family: Ecological Perspectives**
   Fall of odd-numbered years. 3(3-0)
   Adult development and aging in the contexts of family and community. Family relationships in adulthood and aging.

814. **Parenthood and Parent Education**
   Spring of odd-numbered years. 3(3-0)
   Influence of parents on children/youth and factors that influence parenting; approaches to providing education and support for parents.

821. **Early Childhood Education: Curricular Approaches**
   Spring, 3(3-0)
   P: FCE 810.
   Theoretical background, content, and evaluation of early childhood curricula and programs. Influence of research and public policy.