ENVIROMENTAL ENGINEERING  ENE

801.  Dynamics of Environmental Systems
Spring. 3(3-0)  P: CE 483  QA: ENE 801
Principles of mass balance; reaction kinetics; mass transfer; reactor theory in environmental engineering.
QF: CE 481  QA: ENE 801

802.  Physico-chemical Processes in Environmental Engineering
Fall. 3(3-0) P: EN 801
Analysis of physical and chemical principles which form the basis of air and water pollution control and are important in the fate of environmental contaminants in water, air and soils.
QF: CE 483  QA: ENE 802

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

804.  Biological Processes in Environmental Engineering
Spring. 3(3-0) P: ENE 801 or concurrently C: ENE 801 if not already taken
Basic principles for the engineering of microbial processes used in wastewater treatment, in-situ bioreclamation, and solid waste stabilization.
QF: ENE 801  QA: ENS 804

805.  Biological Processes Laboratory
Fall. 1(0-4) P: ENE 804
Laboratory experience in which principles taught in ENE 804 are applied for the treatment of wastewater.
QF: ENE 804  QA: ENS 805

807.  Environmental Analytical Chemistry
Fall. 3(3-0) P: CE 483, approval of the department
Modern techniques for measurement and analysis in environmental engineering; sample preparation; quality assurance.
QF: CE 483

808.  Environmental Analytical Chemistry Laboratory
Spring. 1(0-3) P: CE 807
Laboratory work in environmental analytical chemistry.
QF: CE 483

809.  Special Problems in Environmental Engineering
Fall, Spring, Summer. 1 to 6 credits
May enroll for a maximum of 6 credits.
P: Approval of department.
Solution of environmental engineering problems of limited scope, which do not pertain to the student's thesis.
QF: CE 890

810.  Selected Topics in Environmental Engineering
Fall, Spring, Summer. 3(3-0) May enroll for a maximum of 9 credits.
P: Approval of department
Selected topics in new or developing areas of environmental engineering.
QF: CE 890

999.  Masters Thesis Research
Fall, Spring, Summer. 1 to 8 credits.
May enroll for a maximum of 8 credits.
P: Approval of department
Master's thesis research

999.  Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 12 credits.
May enroll for a maximum of 0 credits.
P: Approval of department
(Doctoral dissertation research
QF: ENE 895

FAMILY AND CHILD ECOLOGY  FCE

145. The Individual, Marriage and the Family
Fall, Spring. 3(3-0) P: FCE 145, SOC 100 or FCE 211. R: Not open to freshmen and sophomores.
Development of the young adult in the human ecological context. Issues of sexuality, gener, parenting, work and family interface, communication and resource use. Diversity in relationships and families.
QF: FCE 145

211. Child Growth and Development: Conception Through Early Childhood
Fall, Spring. 4(3-2) P: PSY 101. R: Not open to freshmen.
Physical, cognitive, social, emotional and ecological aspects of human growth and development from conception through early childhood.
QF: PSY 160 OR PSY 170  QA: FCE 262A

212. Children, Youth and Family
Spring, Fall. 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.
QF: FCE 145 OR FCE 269A  QA: FCE 283

225. Ecology of Family and Human Development
Fall, Spring. 3(3-0) R: NONE
Human development across the lifespan with an ecological perspective. Relationships between human resource professionals and family systems.

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

270. Human Services in the Community
Fall, Spring. 3(3-2) R: Not open to freshmen. Open only to Family Community Services, Family and Consumer Resources, and Home Economics Education students.
Human services from an ecological perspective. Human service needs, resources and methods of service delivery. Participation in community agency required.
QF: FCE 221

320. Interaction Processes with Children in Groups
Fall, Spring. 3(3-0) P: FCE 211. R: Not open to freshmen and sophomores.
Principles of verbal and non-verbal interaction in relation to children's behavior in groups. Focus on young children in early childhood programs.
QF: FCE 262A OR FCE 268B OR FCE 221 QA: FCE 364A

320L. Interaction with Children-Laboratory
Fall, Spring. 1(0-3) P: FCE 211, FCE 220 or concurrently. R: Not open to freshmen and sophomores.
Practice applying principles of interaction to individuals and small groups in early childhood programs.
QF: FCE 262A OR FCE 268B OR FCE 221 QA: FCE 364B

321. Curriculum for Early Childhood Programs 
Fall, Spring. 3(3-0) P: FCE 320, FCE 320L. R: Not open to freshmen and sophomores.
Child development principles and accreditation standards for designing curricula for pre-primary age children. Plan and evaluation of unit activities and programs.
QF: FCE 364AF CE 364B QA: FCE 365A

321L. Curriculum for Early Childhood Programs-Laboratory
Fall, Spring. 1(0-3) P: FCE 320, FCE 320L. R: Not open to freshmen and sophomores.
Curriculum planning for providing learning activities for individual children and small groups. Planning, implementing and evaluating activities.
QF: FCE 364AF CE 364B QA: FCE 365B

350. Management and Decision Making in the Family
Fall of even-numbered years. 3(3-0) R: Not open to freshmen and sophomores.
Management for the realization of values and goals through decision making about resources in the family.
QF: FCE 331 FCE 332

370. Educational Systems in Human Ecology
Fall, Spring. 3(3-0) P: FCE 270. R: Not open to freshmen.
The human ecologist as educator in formal, nonformal, and informal educational systems. Instructional methods appropriate for those environments.
QF: FCE 221 QA: FCE 340

405. Work and Family
Spring. 3(3-0) R: Not open to freshmen and sophomores.
Historical perspectives on work and family. Effects of work on family members across life cycle, and employer and public policy responses.
QF: FCE 465

411. Developmental Study of a Child
Fall, Spring. 2(1-3) P: FCE 211 or PSY 244. R: Not open to freshmen and sophomores.
Ecological analysis of developmental behavior. Application of research findings to observations of a child.
QF: FCE 262 PSY 244 QA: FCE 461

413. Adult Development & the Family: Middle & Later Years
Spring, Summer. 4(3-3) P: One course in psychology or sociology.
P: FCE 211 or PSY 244. R: Not open to freshmen and sophomores.
Social, psychological and biological development within the family. Field study approach.
QF: PSY/SOC QA: FCE 480 FCE 479

414. Parenting
Fall of odd-numbered years. 3(3-0) R: Not open to freshmen and sophomores.
Childrearing in modern society. Adult perceiving roles in various family structures. Support roles of families and communities.

Courses with an asterisk (*) have not been approved by the University Committee on Curriculum.