

**Descriptions – Entomology  
of  
Courses**

**840. Insect Toxicology**  
*Winter of odd-numbered years. 5(3-6) ENT 301, ENT 302; organic chemistry.*  
Chemical and physical properties of insecticides, relationship of chemical structure to mode of action, and physiological basis of toxicological action.

**871. Biology of Nematodes**  
*Spring. 4(2-6) ENT 470 or approval of department. Interdepartmental with the Department of Botany and Plant Pathology.*  
Ontogeny, taxonomy, morphology, pathology and ecology of nematodes, with special reference to plant-parasitic and phytopathogenic species.

**881. Biology of the Arthropoda**  
*Winter. 5(3-6) ZOL 481 or approval of department. Interdepartmental with and administered by the Department of Zoology.*  
Ecology, life cycles, morphology, taxonomy, and distribution of arthropods other than insects.

**890. Problems**  
*Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Majors or approval of department.*  
Advanced individual work in: apiculture, aquatic insects, insect biochemistry, biosystematics, economic insects, insect ecology, forest insects, morphology, nematology, insect physiology, plant disease transmission, insect toxicology, araneida, acarina, medical entomology, chemistry of insecticides, insect biology, extension entomology, systems.

**899. Research**  
*Fall, Winter, Spring, Summer. Variable credit. Approval of department.*

**940. Analytical Techniques for Biological Compounds I**  
*Fall. 4(2-6) Organic chemistry, approval of department.*  
Application, extraction, cleanup and purification techniques employed in analysis of biologically active compounds. Stresses use of radioisotopes, and column, paper, thin-layer, and molecular sieve chromatography.

**941. Analytical Techniques for Biological Compounds II**  
*Winter. 4(2-6) ENT 940.*  
Analytical techniques used for identification and quantification of biologically active compounds. Emphasis on spectroscopy and gas-liquid chromatography.

**999. Research**  
*Fall, Winter, Spring, Summer. Variable credit. Approval of department.*

**FAMILY AND CHILD  
SCIENCES FCS**

**College of Human Ecology**

**145. The Individual, Marriage and the Family**  
*Fall, Winter, Spring. 4(4-0) Students may not receive credit in both FCS 145 and S W 228.*  
Individual as young adult. Alternative living patterns. Marriage as social institution. Courtship and marriage patterns. Adjustments in marriage. Attitudes and roles in family living. Crises situations. Family planning.

**255. Family and Individual Development: Life Cycle**  
*Winter, Spring. 3(3-0) Three terms of natural science; sophomores.*  
Overview of family development. Predictable individual developmental changes over the life span. Cognitive, moral, physical, psychological and social aspects. Interface between individual and family development.

**262A. Child Growth and Development: Conception through Early Childhood**  
*Fall, Winter, Spring. Summer of odd-numbered years. 3(3-0) Sophomores, PSY 160 or PSY 170 or ED 200; FCS 262B concurrently.*  
Physical, cognitive, social, and emotional aspects of human growth and development from conception through early childhood.

**262B. Child Growth and Development Laboratory**  
*Fall, Winter, Spring. Summer of odd-numbered years. 1(0-3) FCS 262A concurrently or approval of department.*  
Observation of human development in infants and young children.

**263. Children, Youth and the Family**  
*(245.) Fall, Winter, Spring. 3(3-0) Sophomores; SOC 241 or FCS 145 or FCS 262A; or approval of instructor.*  
A family systems perspective of middle childhood, adolescence, and youth development is presented, incorporating childhood through launching stages of family development. Interactions of parents, children and socio-cultural factors are analyzed.

**364A. Interacting with Young Children in Child Development Centers**  
*(364.) Fall, Winter, Spring. 3(3-0) FCS 262A, FCS 262B each with minimum grade of 2.0; FCS 364B concurrently.*  
Application of principles of human growth and development to personal interaction with children ages three to six individually and in small groups in schools of early childhood.

**364B. Interacting with Young Children-Laboratory**  
*Fall, Winter, Spring. 1(0-3) FCS 364A or concurrently, FCS 262A, FCS 262B each with a minimum grade of 2.0.*  
Experience in interaction with children ages two to six years, individually and in small groups in a child development center.

**369A. Learning Activities for Early Childhood Programs**  
*Fall, Winter, Spring. 3(3-0) Majors: FCS 262A and FCS 262B, FCS 364A and FCS 364B each with a minimum grade of 2.0; FCS 369B concurrently. Others: approval of department.*  
Planning learning activities and teaching strategies for children ages 3 to 6 in early childhood education programs.

**369B. Learning Activities for Early Childhood Programs-Laboratory**  
*Fall, Winter, Spring. 1(0-3) FCS 369A concurrently and approval of department.*  
Experience in planning and carrying out learning activities with young children in an early childhood program.

**400H. Honors Work**  
*Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 16 credits. Seniors; approval of department.*

**442. Minority Families in America**  
*(401.) Winter. 3(3-0) Juniors.*  
Historical, structural, functional components of minority family systems in white America. Centers on a particular minority family system each term. Life styles, pressures, adaptations, viability and continuity of minority family subculture.

**444. Interpersonal Relationships in the Family**  
*Fall, Spring. Summer of even-numbered years. 3(3-0) FCS 145 or FCS 263 or approval of department.*  
Relationships between and among family members as they are affected by other systems, and by physical, cultural, social-psychological forces within the family eco-system. Contemporary family life issues.

**445. Human Sexuality in the Family**  
*(365.) Fall, Winter. 3(3-0) Juniors. Credit may not be earned in both FCS 445 and PSY 290.*  
Personal, interpersonal, societal meanings of human sexuality, utilizing outgoing small peer group interaction. Nonlecture, value clarification approach, integrating reflection on research findings, family, peer and cultural influences.

**446. Approaches to the Study of the Family**  
*Fall, Winter, Summer of odd-numbered years. 4(4-0) FCS 145 or FCS 263, FCS 444.*  
The family is studied from several approaches. Case studies, films, literary materials, research studies and observations of living situations are included.

**461. Individual Child Study**  
*Fall, Winter. 3(2-2) Majors: FCS 364; others: FCS 262A, PSY 244 or ED 412.*  
An in-depth analysis of development and behavior utilizing regular observation of a young child. Applications of theories of child growth and behavior.

**464A. Practicum in a Child Development Center**  
*Fall, Winter, Spring. Summer of odd-numbered years. 3 to 7 credits. FCS 262A, FCS 262B, FCS 364A, FCS 364B, FCS 369A, FCS 369B each with a minimum grade of 2.0 and approval of department.*  
A directed practicum in planning, implementing and evaluating the learning environment, in a class of young children during an entire term.

**464B. Problems in Teaching in a Child Development Center**  
*Fall, Winter, Spring. Summer of odd-numbered years. 2(2-0) FCS 464A concurrently, HEC 301.*  
Analysis of problems in teaching in an early childhood program. Application of child guidance techniques and principles.

**467. Administration of Child Development Centers**  
*Spring. 3(3-0) FCS 464A, FCS 464B or concurrently; or approval of department.*  
Administrator's role in child development centers. Application of child care philosophy, management and communication skills to operation of early childhood education programs. Federal, state, and local regulations and support services.

- 468. Teacher-Parent Interaction**  
Fall, Winter. 3 credits. Majors: FCS 464A, FCS 464B or concurrently; others: FCS 262A or ED 412.  
Analysis of parent-teacher communication and interaction, parent involvement, and parent education related to early childhood education programs operated by schools, churches, or community agencies. Field experience when feasible.
- 470. Current Issues in Family and Child Sciences**  
Spring. 3(3-0) FCS 464A, or Seniors, or approval of department.  
Analysis of current events, issues; of legislation which has bearing on homes, families and children and children's programs. Implications for professional decisions and actions.
- 480. Human Development and Interpersonal Relationships: The Middle and Later Years**  
Spring. Summer of odd-numbered years. 4(3-1) Introductory sociology and psychology; FCS 145 or FCS 263 or FCS 444.  
Social-psychological-biological development and socialization for roles in middle and later years. Generational relationships; societal influences. Case study approach involving interaction with an adult or family in middle or later years.
- 495. Independent Study**  
Fall, Winter, Spring, Summer. 4 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.  
Study of a selected topic under the guidance of a faculty adviser in the area of speciality.
- 498. Field Study**  
Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.  
Study in off-campus situations in a variety of ways using involvement in volunteer, governmental or business-sponsored community service agencies to further insights into interaction among the individual, the family and the community.
- 801. Seminar in Family Life**  
(801A.) Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 12 credits. Approval of department.
- 802. Seminar in Child Development**  
(801B.) Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 12 credits. Approval of department.
- 810. Workshop**  
Summer. Variable credit. Approval of department.  
Content varies depending on nature of workshop.
- 813. Special Studies in Family Life**  
(813B.) Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
- 819. Theories of Child Development**  
(862.) Fall. 3(3-0) FCS 262A or child psychology.  
Comparative study of conceptual frameworks utilized in child development.
- 820. Human Development in the Family: Physiological Development**  
Fall. 4(4-0) Six credits in child development or approval of department.  
Selected aspects of family members' physiological potential, development, status explored. Family's contributions to members' physiological potential for growth and development and to realization of human potential are seen as fundamental.
- 821. Human Development in the Family: Personality**  
Winter. 4(4-0) Six credits in child development or approval of department.  
Influence of child-rearing practices and parent-child relationships on developing human personality. Application of research findings and theoretical approaches to psychological development in the family and family-related situations.
- 822. Human Development in the Family: Socialization**  
Spring. 4(4-0) Basic course in sociology; 6 credits in child development or family life or approval of department.  
Influence of family structure and interaction upon socialization from infancy to adulthood. Relationship of family to processes in larger social environment, and influence of these on human social development.
- 830. Individual Readings**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 831. Death, Dying, and the Family**  
Spring. 3(3-0)  
Provides students with an understanding of various theoretical frames of reference developed for viewing death within the family and strategies designed to assist them to deal with it.
- 840. Topics in Child Development**  
Fall, Winter, Spring. Variable credit. 3(3-0) to 6(6-0) FCS 262A or a child growth and development course.  
In-depth analysis of a selected topic pertinent to the care and education of young children in child development centers.
- 841. Early Childhood Education: Curricular Approaches**  
Spring. 3(3-0) FCS 262A or a child growth and development course.  
Exploration of theoretical background and content of curricular approaches in early childhood programs. Analysis and evaluation of early childhood curricular materials. Experience in designing and sequencing activities for young children.
- 842. Assessment of Development of the Young Child**  
Fall. 3(3-0) A child growth and development course.  
Survey of assessment instruments and procedures for children from birth to age seven. Techniques for practitioner or parent to use to assess physical, social, emotional and intellectual development.
- 843. Play and Human Development**  
Winter of odd-numbered years. 3(3-0) One course in child development or human development.  
Role of play in human development. Functions of play related to other aspects of development. Analysis of theory related to play behavior.
- 850. Aging in the Family**  
Fall. 3(3-0) FCS 480 or approval of instructor.  
Provides students with a knowledge and understanding of the literature in aging in the family and develops an appreciation of the interrelationships involved in this multidisciplinary area.
- 852. Communication and Family Crises**  
Winter. 3(3-0) Approval of department.  
Dynamics of family communication and adjustment to crisis during the life cycle. Delineation of major types of family crises and their consequences. Strategies for positive communication and resolution.
- 853. Interpersonal Effectiveness**  
Fall. 3(3-0) FCS 444 or approval of department.  
Theory and research underlying personal development and effective relationships in the family system. Professional application of interpersonal effectiveness training. Approved through Summer 1980.
- 855. Topics in Family Relationships**  
Fall. 2 to 4 credits. FCS 444 or FCS 445 or approval of department.  
In-depth analysis of a topic related to the American family as an interactive system within the larger society.
- 899. Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 999. Research**  
Fall, Winter, Spring, Summer. Variable credit.  
Research in home management and economics of the family.

## FAMILY ECOLOGY F E

### College of Human Ecology

- 221. The Role of the Helping Professions and Organizations in Community Services**  
(IDC 221.) Fall, Winter, Spring. 4(4-0) Interdepartmental with and administered by the Department of Urban and Metropolitan Studies.  
Analysis of human and community needs; review and examination of existing and emerging resources to meet those needs; role of professionals and volunteers in providing community and human services.
- 238. Personal Finance**  
Fall, Winter, Spring. 3(3-0)  
Strategies, techniques and resource materials useful in improved management of personal finances. Special emphasis on stretching meager resources.
- 332. Theory and Application of Home Management**  
Fall, Winter, Spring. 4(3-2) Juniors and HEC 301 or concurrently; or approval of department.  
Principles of effective home management and their application in a living situation.