

**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) 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) Freshmen or Sophomores or approval of department. Students may not receive credit in both 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.

**245. Children, Youth and the Family**  
(261.) Fall, Winter, Spring. 3(3-0) Sophomores, SOC 241.

Focuses on family system. Stages of family development studied include childbearing through launching. Interaction of parent, children and societal forces, particularly in middle childhood and adolescent stages emphasized.

**262A. Child Growth and Development: Conception Through Early Childhood**

(362A.) Fall, Winter, Spring. Summer of odd-numbered years. 3(3-0) A biological science or physiology course and SOC 241; ED 200 or PSY 160 or 170.

Physical, cognitive, social, and emotional aspects of human growth and development from conception through early childhood.

**262B. Child Growth and Development Laboratory**

(362., 362B.) Fall, Winter, Spring. Summer of odd-numbered years. 1(0-3) 262A concurrently or approval of department.

Observation of human development in infants and young children.

**364. Interacting with Young Children in Child Development Centers**

Fall, Winter, Spring. 3(2-3) 262A and 262B or PSY 245.

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.

\*Name changed November 1, 1968. Formerly Home Management and Child Development.

†Name changed July 1, 1970. Formerly College of Home Economics.

**365. Human Sexuality and the Family**  
Fall, Winter. 3(3-0) Credit may not be earned in both FCS 365 and PSY 290. Juniors.

Contemporary issues about human sexuality. Individual assumptions, standards, behaviors vis-a-vis the family, the peer culture, the larger society. Research findings, guest speakers, small group interaction are included.

**369A. Learning Activities for Early Childhood Programs**

(369.) Fall, Winter, Spring. 3(3-0) Majors: 262A and B and 364; others: ED 312.

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**

(369.) Fall, Winter, Spring. 1(0-3) 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 re-enroll for a maximum of 16 credits. Seniors; approval of department.

**401. Minority Families in America**

Winter. 3(3-0) S S 213 or approval of department.

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) 145 or 245 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.

**446. Approaches to the Study of the Family**

Fall, Winter, Summer of odd-numbered years. 4(4-0) 145 or 245, 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: 364; others: 262A, PSY 245 or ED 312.

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 6 credits. Majors: 364, 369; others: 262A and 262B, or ED 312, 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. 2(2-0) 464A concurrently.

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) 464A and 464B or concurrently.

Analysis of the administrator's role in child development centers. Application of philosophical approaches, communication techniques and management skills to operating early childhood education programs. Licensing and other regulations.

**468. Teacher-Parent Interaction**

Fall, Winter. 3 credits. Majors: 464A and 464B, or concurrently; others: 262A or ED 312, approval of department.

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.

**469. Physical and Physiological Growth of Children**

(463.) Winter, Spring. 4(3-2) HNF 102; three terms of Natural Science. Interdepartmental with Human Nutrition and Foods.

Physical and physiological growth patterns. Experimental evidence for nutritional requirements. Applications to feeding practices, and physical activity of children.

**470. Current Issues in Family and Child Sciences**

Fall. 3(3-0) 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; 145 or 245 or 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 re-enroll 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 specialty.

**498. Field Study**

Fall, Winter, Spring, Summer. 4 to 12 credits. May re-enroll 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.

**801A. Seminar in Family Life**

(800B.) Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 12 credits. Approval of department.

**801B. Seminar in Child Development**

(800B.) Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 12 credits. Approval of department.

**810. Workshop**

Summer. Variable credit. Approval of department.

Content varies depending on nature of workshop.

**813B. Special Studies in Family Life and Child Development**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**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.

**862. Advanced Child Study**  
Spring. Summer of odd-numbered years. 3(3-0) 262A and B or ED 312 or approval of department.

Current trends in field of child development based on research and on significant new books. Careful observations of children in a variety of informal situations will be made within the limits of available resources.

**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†**

**110. Man in His Near Environment**  
(H E 110.) Fall, Winter, Spring. 3(3-0) New students in Human Ecology.  
Ecological approach to the study of man and his near environment stressing the quality of life as it relates to individual, family and environmental forces.

**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.

\*Established July 1, 1970.  
†Name changed July 1, 1970. Formerly College of Home Economics.

**331. Management and Decision Making in the Family**  
(FCS 331.) Fall, Winter, Spring. Summer of even-numbered years. 4(4-0) Juniors and EC 201, or SOC 241, or three terms of social science.

Presentation of the integrated nature of home management; concerns, values, and goals as reflected in decision-making about family resources.

**332. Theory and Application of Home Management**  
(FCS 332.) Fall, Winter, Spring. 4(1-4) with residence; 4(2-4) without residence. FCS 245; F E 331 or concurrently; HNF 220 or approval of department.

Principles of effective home management and their application in a living situation. Residence in a home management house provided.

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

**401. Contemporary Issues in Human Ecology**  
(H. E. 401.) Fall, Winter, Spring. 3(3-0) Seniors.

**402. Problems in Curriculum Methods and Materials**  
(H E 402.) Fall, Summer. 2 to 5 credits. May re-enroll for a maximum of 15 credits. Approval of department.

**403. Problems in Testing and Evaluation**  
(H E 403.) Winter, Summer. 2 to 5 credits. May re-enroll for a maximum of 9 credits. ED 465 or approval of department.

**436. Consumer Economics Problems**  
(FCS 439., 439.) Fall, Winter, Spring. 3(3-0) EC 200 or 201.

Nature of current consumer problems. Sources of information and methods of evaluating information in the search for solutions to problems and for improved consumer protection.

**437. Management of Work Capacity in the Home**  
(FCS 437.) Winter, Summer of even-numbered years. 3(3-0) 331 or approval of department.

Analysis of the resource of human work capacity in the home—physiological and psychological factors; principles and use of work simplification.

**438. Family Financial Management**  
(FSC 438.) Fall, Winter, Spring. Summer of even-numbered years. 4(4-0) 331; EC 201 or PAM 201.

Major financial alternatives available to families during the founding, active parenthood, and retirement stages. Implications for the community of the family's financial decisions.

**450. Selected Topics in Family Ecology**  
(H E 450.) Spring. 3 credits. Seniors.  
Current issues of concern to professional family ecologists.

**495. Independent Study**  
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

**498. Field Study**  
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

**800A. Seminar in Family Ecology**  
(FCS 800A.) Fall, Winter, Spring. Summer of even-numbered years. 3(3-0) May re-enroll for a maximum of 12 credits. Approval of department.

**813A. Special Studies in Family Ecology**  
(FCS 813A.) Fall, Winter, Spring. Summer. Variable credit. Approval of department.

**819. Research Methods**  
(FCS 819.) Fall, Spring. 3(3-0) Approval of department. Interdepartmental with and jointly administered with Human Environment and Design Department.

**820. Critique of Research**  
Winter, Summer. 3(2-0) 819.  
A critical analysis of research on the family and its near environment. Emphasis is placed on critique of methodology with some consideration of research needs.

**822. New Developments**  
(H E 822, ED 822E.) Summer of odd-numbered years. 3(3-0) ED 436.  
Trends in the field of family ecology and the relevance to current social needs.

**823. Curriculum**  
(H E 823, ED 822K.) Fall, Summer. 3(3-0) Approval of department.  
Clarification and use of a rationale in curriculum development. Special problems in application.

**824. Programs in Home and Family Life Education**  
(H E 824, ED 822M.) Spring of odd-numbered years. Summer. 3(3-0) Approval of department.  
Develops depth in home and family living courses offered in secondary school programs.

**825. Methods of Teaching Adults**  
(H E 825, ED 828A.) Spring of even-numbered years. 3(3-0) Approval of department.  
Developmental needs of adults and changes in society affecting families as a basis for development of adult programs in homemaking education. Experiences will be provided with programs in progress.

**826. Supervision**  
(H E 826, ED 837B.) Winter of odd-numbered years; Summer of even-numbered years. 3(3-0) Approval of department.  
Objectives, techniques, and organization of supervising teaching in teacher education programs.

**827. Evaluation**  
(H E 827, ED 868.) Winter, Summer. 3(3-0) Approval of department.  
Evaluation procedures and practices for various levels of educational programs in the area of human ecology.

**830. Individual Readings**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**831. Values and Family Behavior**  
Winter of even-numbered years. Summer of odd-numbered years. 4(4-0) Approval of department.  
Role and function of values as fundamental to understanding behavior in the family. Cognition and actualization of values. Resolution of value conflicts. Conceptual and methodological approaches to study of values.