Human Anatomy

See Courses in Cell Biology and Human Anatomy (CHA), on page 432.

Human and Community Development

See Human Ecology, on page 373.

Human Development

( College of Agricultural and Environmental Sciences)

Faculty

See Human Ecology, on page 373.

The Major Program

Human development explores the developmental process in humans throughout the life cycle. Biological, cognitive, and personality/sociocultural aspects of development are studied.

The Program. Human development majors complete a group of preparatory courses in anthroplogy, general biology, genetics, history, philosophy, physiology, psychology, and statistics. Upper division students can design their programs in consultation with a faculty member to emphasize their particular interest. For instance, students can study the cognitive, social, and biological aspects of human development while emphasizing child or adult development.

Internships and Career Alternatives. At least one practicum course is required. A second practicum or supervised internship can be used to fulfill the restricted elective requirement for the major. In addition, students can intern at schools, early childhood education or senior centers, hospitals, rehabilitation
B.S. Major Requirements: Depth Subject Matter, Restricted Electives and required upper-division courses taken prior to declaration. Students must have achieved a 2.000 GPA in any combined grade point average of at least 2.500. All of the following courses must be taken for a letter grade.

Preparatory Requirements. UC Davis students who wish to change their major to Human Development must be in good academic standing. Students who wish to change their major to Human Development must complete the following courses with a combined grade point average of at least 2.000. All of the following courses must be taken for a letter grade:

- Psychology 1
- Statistics 10 or 13V or Psychology 41 or Sociology 46A and 46B

One course from:
- Anthropology 1, 2 or 15
- One course from: Biological Sciences 2A, 10, 10V; Microbiology 10; Molecular and Cellular Biology 10; or Neurobiology, Physiology, 10, 12 or 101

Students must have achieved a 2.000 GPA in any required upper-division courses taken prior to declaring the major.

All courses satisfying the Preparatory Subject Matter, Depth Subject Matter, Restricted Electives and English requirement must be taken for a letter grade.

B.S. Major Requirements:

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<th>Preparatory Subject Matter</th>
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<tr>
<td>Preparatory Subject Matter</td>
<td>38-48</td>
<td>Depth Subject Matter</td>
<td>50-54</td>
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Aging and Adult Development 18-20

Three courses of following courses: Human Development 100C, 117, 143, 160, 161, or 163. Required upper-division courses taken prior to declaring the major.

Advocated Placement English score of 4 or 5 which satisfies English 3 and/or University Writing Program 1. The Upper Division Composition Exam does not satisfy the requirement.

Minor Adviser: Lisa Miller

Minor Program Requirements: The Department of Human and Community Development offers two minors.

Upper Division

100A. Infancy and Early Childhood (4)
Lecture—4 hours. Prerequisite: Psychology 1, Biological Sciences 1A, 2A, or 10; or Molecular and Cellular Biology 10; or Neurobiology, Physiology, and Behavior 10 or 12; or Microbiology 10. Biological, social, and cultural influences in the psychological growth and development of children, prenatal through age six. Two observations of preschool children required. —F, W, Su. (F, W, Su) Hibel

100B. Middle Childhood and Adolescence (4)
Lecture—4 hours. Prerequisite: Psychology 1. Development during early, middle, and late adulthood; biological, cognitive, and psycho-social aspects of adult development. Emphasis on normative patterns of development which characterize "successful aging." —F, S. Ober

101. Cognitive Development (4)
Lecture—3 hours, term paper. Prerequisite: course 100A or 100B or Psychology 140. Interplay of biological and socio-cultural factors in the emotional, cognitive and social development from middle childhood through adolescence. —W, S. Su. (W, S, Su) Geyer, Nishina

100C. Adulthood and Aging (4)
Lecture—4 hours. Prerequisite: Psychology 1. Development during early, middle, and late adulthood. Application to fieldwork, the role of plasticity. Topics include attention, memory, concepts about the physical and social world, and language. (Same course as Psychology 141.) GE credit: Wrt|WE—F, W, S. Chen, Gibbs, Goodman, Gradu Est, Lagatutta, Rivera

102. Social and Personality Development (4)
Lecture—3 hours, term paper. Prerequisite: course 100A or 100B or Psychology 140. Pass One. Social and personality development of children, infancy through adolescence. Topics include the development of personality, achievement motivation, self-understanding, sex role identity, and antisocial behavior. Emphasis on the interface between biological and social factors. (Same course as Psychology 142.) GE credit: SocSci, Div| Wrt|SS—W, W, S, F. (F, W, S, Su) Belsky, Gibbs, Hastings, Thompson

103. Cross-Cultural Study of Children (4)

98. Directed Group Study for Undergraduates (1-5)
Prerequisite: consent of instructor. (P/NP grading only)

99. Special Study for Undergraduates (1-5)
(P/NP grading only)

Graduate Study.
Graduate study is available through a Master of Science degree in child development, and a Ph.D. degree in human development. See also Graduate Studies, on page 120.

Courses in Human Development (HDE)

Questions pertaining to the following courses should be directed to the instructor or to the Human and Community Development Advising Center in 1303 Hart Hall 530-752-2244.

Lower Division

12. Human Sexuality (3)
Lecture—3 hours. Vocabulary, structure/function of reproductive systems in pre-natal development; puberty and adolescence; development of sexuality; raped and sexual assault; birth control; sexually transmitted diseases; homosexuality; establishing/maintaining intimacy; sexual dysfunctions; communication; enhancing sexual interaction, cultural differences in attitudes towards sexuality. GE credit: SocSci, Div| ACGH, DD, SS, WE—F. (F, S)

99. Internship (1-12)
Internship—3-36 hours. Prerequisite: field work experience or at least one course (e.g., course 100A, 100B, 140 or 140L) related to fieldwork assignment; consent of instructor. Supervised internships, off campus and on campus, in community and institutional setting. May be repeated for a total of 12 units. CE credit: Internship (supervised) participation in program delivery or assessment. (P/NP grading only) —F, W, S. (F, W, S)

Fall 2011 and on Revised General Education (GE) Requirements:

Arts and Humanities; Science and Engineering; Social Sciences; ACGH—American Cultures; DD—Domestic Diversity; OL—Oral Skills; QL—Quantitative; SL—Scientific; VL—Visual; WC—World Cultures; WRT—Writing Experience
including natural history, ecology and evolution of life span; description of basic demographic techniques and possible methods. (Same course as Entomology 117.) GE credit: SciEng, Wrt|SE, SL, WE. —F (W) Carey

120. Research Methods in Human Development (4)
Lecture—3 hours; laboratory—3 hours. Prerequisite: Statistics 13 or 13V or Education 114 or Psychology 41 or Sociology 46A and 46B. Scientific process, research designs, and experimental controls; APA manuscript format; critical writing; statistical analysis and interpretation of results. Laboratory exercises to collect data, analyze and interpret results, and write scientific papers. GE credit: SocSci, Wrt|SS, WE. —F, S. (F) Liu, Nishina

121. Psychological Assessment (4)
Lecture—4 hours. Prerequisites: courses 100A or 100B; Statistics 13 or 13V or Psychology 41 or Sociology 46A and 46B. Current issues and methodology related to the process of psychological assessment with children. Offered irregularly.

130. Emotionally Disturbed Children (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: courses 100A and 100B; or Psychology 140; consent of instructor. Discussion of psychosis, behavior disorders, and learning difficulties in children. —W. (W) Choe

132. Individual Differences in Cognition (4)
Lecture—4 hours. Prerequisite: Psychology 1; course 100C or Psychology 200B; consent of instructor. Individual differences in cognition, including learning disabilities and giftedness. Education implications and neurodevelopmental substrates of individual differences in cognition. Offered irregularly.

140. Communication and Interaction with Young Children (2)
Lecture—2 hours. Prerequisite: course 100A; concurrent enrollment in course 140L required; consent of instructor. Development and intervention issues in the first five years. An laboratory time at the Child and Family Studies Center located at 244 First Street, Davis, CA. Integration of research, theory and practice in child development, emphasizing the role of relationships in creating a growth-promoting environment for young children. Includes: peer relationships, emotional understanding and self regulation, attachment, communication and school readiness. —F, W, S. (F, W, S.) Chen

140L. Laboratory in Early Childhood (3-5)
Laboratory—6-15 hours; laboratory/discussion—3 hours. Prerequisite: course 140, must be taken concurrently for first 3 units of credit; students must contact the Child and Family Studies to receive consent of instructor. Limited enrollment. Application of theories of learning and development to interaction with infants, toddlers, and preschoolers at Early Childhood Laboratory. Applied skills in communication, guidance and curriculum. May be repeated twice for credit. (P/NP grading only) —F, W, S. (F, W, S.) Chen

141. Field Study With Children and Adolescents (4-6)
Lecture—2 hours, fieldwork—6-12 hours. Prerequisite: course 100A or 100B; consent of instructor. Study of children’s affective, cognitive and social development within the context of family/school environments, hospitals and foster group homes. May be repeated for credit for a total of 12 units. —F, S. (F, W, S.)

142. Field Study with Emotionally Disturbed Children and Adolescents (4-6)
Discussion—1.5 hours, fieldwork—6-12 hours. Prerequisite: course 130 (may be taken concurrently; consent of instructor. Field study with children who are identified as emotionally disturbed, including those with internalizing and externalizing behavioral problems. May be repeated for credit for a total of 12 units following consultation with and consent of instructor.

143. Field Studies of the Elderly (4-6)
Discussion—2 hours; field work—6-12 hours. Prerequisite: course 100C or 100D may be taken concurrently; consent of instructor. Apply theory and research on adult development and aging, work with older adults in a variety of settings, and develop skills relevant to conduct a small research project. —W. (W) Miller, Ober

160. Social Aspects of Aging (4)
Lecture—4 hours. Prerequisite: course 100C. How the social context affects adult development and aging. Emphasis on demography, social policy, culture, and adaptation. Oral histories as class projects. Offered in alternate years. GE credit: Div. —F. (F)

161. Applied Cognition and Aging (4)
Lecture/discussion—4 hours. Prerequisite: Psychology 1; course 100C. Principles from cognition and aging and applies these to real-world concerns in areas including education, technology, job performance, and health. Considers physical and social changes in later life that impact functioning. Offered in alternate years. GE credit: SocSci, Wrt|SS, WE. —S. (F) Miller

163. Cognitive Neuropsychology in Adults and Aging (4)
Lecture/discussion—4 hours. Prerequisite: Psychology 1; course 100C recommended. Theories, methods, and findings concerning the relationship between cognitive processes and brain functioning. Readings, lecture, and in-class discussions cover research on normal younger and older adults, neuro-psychological case studies, and selected patient groups (e.g., amnesia, schizophrenia, Alzheimer’s disease). Offered in alternate years. —F (W) Ober

190C. Introductory Research Conference (1)
Discussion—1 hour. Prerequisite: involvement in ongoing research; consent of instructor. Instructors lead discussions with undergraduate students who involve themselves in their own research projects. Research papers are reviewed and aspects of project proposals developed out of class are presented and evaluated. May be repeated for credit. (P/NP grading only) —F, W, S. (F, W, S.)

192. Internship (1-12)
Internship—3-36 hours. Prerequisite: upper division standing and consent of instructor. Supervised internship off and on campus, in community, and institutional settings. (P/NP grading only). —F, W, S. (F, W, S.)

198. Directed Group Study (1-5)
(P/NP grading only)

199. Special Study for Advanced Undergraduates (1-5)
(P/NP grading only)

Graduate

200A. Early Development (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: graduate standing; basic biology or psychology; one upper division course in psychology or a related field; one upper division or graduate course in developmental psychology (may be taken concurrently). Theory and research on the biological, social, cognitive, and cultural aspects of development from conception to the age of five years. —F (F) Belsky, Chen, Hibel

200B. Middle Childhood and Adolescence (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: graduate standing; basic biology or psychology, and at least two upper division or graduate-level courses in psychology or related fields. Theory and research on biological, cognitive, social, and cultural influences on behavioral development from age five years until late adolescence. —W. (W) Choe, Gujer, Nishina

200C. Development in Adulthood (4)
Lecture/discussion—4 hours. Theory and research focusing on social, personality, cognitive, and biological development from early to late adulthood. Emphasis is on theory development and continuity and change. —S. (F) Miller, Ober

203. Adolescent Behavioral and Emotional Development (4)
Lecture/discussion—4 hours. Prerequisite: course 200A. Application of recent theories, research methods, and major findings on adolescent behavioral and emotional development, including contextual and genetic influences on adolescence, pubertal transitions, and social/family contexts and processes. Emphasis on multi-level mechanisms underlying adolescent behavioral and emotional development. Offered in alternate years.

204. Developmental Neuroscience and Adolescent Psychopathology (4)
Lecture—4 hours. Prerequisite: graduate standing in Human Development, Psychology, Education, Neuro-sciences or consent of instructor. Introduction to human developmental neuroscience. Understanding of adolescence and its characterization as a time of risky and unhealthy behavior and vulnerability to onset of mental disorder as well as issues around plasticity of the adolescent brain and prevention/intervention. Offered in alternate years. —W. (W) Guyer

205. Path Analysis, Factor Analysis, and Structural Equation Modeling (4)
Lecture—4 hours. Prerequisite: Psychology 204B or equivalent graduate courses in statistics or permission of the instructor; familiarity with multiple regression and the basics of matrix algebra. Graduate standing in HDGG, Psychology, Sociology, Education, or a related social science, or permission of the instructor. Introduction of basic concepts, principles, and applications of structural equation modeling including path analysis, confirmatory factor analysis, multiple-group modeling, and latent growth curve modeling. Offered in alternate years.

207. Topics in Applied Cognitive Aging (4)
Lecture/discussion—2 hours. Prerequisite: graduate standing in Human Development Graduate Group, Psychology, Education, or a related social science, or consent of the instructor. Apply principles from cognitive aging to real-world concerns in areas such as education, technology, job performance, and health. Examine how physical and social changes occurring in later life impact functioning. Offered in alternate years. —F. Miller

210. Theories of Behavioral Development (3)
Seminar—4 hours. Prerequisite: consent of instructor. An overview of mechanisms of organismic development and the implications of developmental biology for the analysis of behavioral ontogeny, considering the parallels between processes of organismic development and behavioral development in children and infra-human mammals. Offered in alternate years. —S. (F)

220. Research Methods in Human Growth and Development (4)
Lecture—4 hours. Prerequisite: Statistics 13 or the equivalent and at least two upper division courses in Human Biology or Developmental Psychology. Overview of qualitative and quantitative research approaches to empirical inquiry in the social sciences, with a focus on theory and research methods in biological growth and cognitive and social/Emotional development from prenatal period to late adolescence. —W. (W) Liu

232. Cognition and Aging (3)
Lecture/discussion—3 hours. Prerequisite: course 200C. The manner in which cognitive processes are affected by aging as well as an understanding of the changes in the central nervous system occurring with aging. Offered in alternate years. —Ober
Human Development (A Graduate Group)

234. Children’s Learning and Thinking (Seminar) — 3 hours. Prerequisite: course 200A or Psychology 212 recommended. Analysis of theories and research methods of children’s higher-order cognition, including origins of knowledge, development of problem-solving skills, reasoning strategies, and specific concepts; with an emphasis on the underlying mechanism involved in children’s thinking and learning processes. Offered in alternate years. — (S) Chen

238. The Context of Individual Development (Seminar) — 3 hours. Prerequisite: graduate standing in Human Development, Child Development, Education, Psychology, Anthropology, Sociology, or consent of instructor. Analysis of human development within the context of daily life. Contextualizing theories and methods of developmental psychology will be distinguished from contextual theories and methods. Developmental psychology models will be distinguished from child psychology models. Offered in alternate years.

239. Developmental Trajectories in Typical and Atypical Children; Birth to Five (Seminar) — 4 hours. Prerequisite: graduate standing in Human Development, Psychology, Sociology, a related social science, or permission of the instructor. Discuss theories of development and typical and atypical children from birth to five from a socio-cultural perspective including parent-child interaction, peer interactions, cultural contexts of learning, as well as theoretical and empirical issues for understanding continuities and discontinuities in development. Offered in alternate years. — (S) Chen

240. Peer Relationships During Adolescence (Seminar) — 4 hours. Graduate standing in Human Development, Psychology, Education, or consent of instructor. Course examines the role of peer relationships in adolescent development including forms and functions at the individual, dyadic and group levels. Ethnicity and cross-cultural research will be discussed. Emphasis on methodology, including surveys, peer nominations/sociometrics, experimental, and observational designs. Offered irregularly. — K. Conger

250. Current Research on Family Relationships (Seminar) — 6 hours; term paper. Graduate standing in Human Development Graduate Group, Psychology, Sociology, a related social science, or consent of instructor. Course examines the competing interests of research, policy, and service on current issues of family functioning and individual well-being. The course considers communication barriers between researchers, practitioners, and policy makers. Offered in alternate years. — (S) K. Conger

252. Family Research, Programs and Policy (Seminar) — 3 hours; term paper. Graduate standing in Human Development, Psychology, Sociology, related social sciences, or consent of instructor. Course examines the competing interests of research, policy, and service on current issues of family functioning and individual well-being. The course considers communication barriers between researchers, practitioners, and policy makers. Offered in alternate years. — (F, W, S) K. Conger

290. Seminar (Seminar) — 3 hours. Discussion and evaluation of the research, theory, and issues in human development. Different topics each quarter. — (F, W, S) (F, W, S)

290C. Research Conference (Discussion) — 1 hour. Prerequisite: graduate standing and consent of instructor. Supervising instructors lead research discussions with their graduate students. Research papers are reviewed and project proposals are designed and evaluated. May be repeated for credit. (S/U grading only.)— (F, W, S, F, W, S)

291. Research Issues in Human Development (Seminar) — 4 hours. Prerequisite: standing in the Behavioral Sciences. In-depth presentations of research issues in particular areas of behavioral development. — (F, W) (F, W) J. Conger

292. Graduate Internship (1-12) — Internship — 3-36 hours. Prerequisite: consent of faculty (internship sponsor) and satisfactory completion of placement-relevant coursework, for example: Education 213, 216; course 222, 242; Law 272, 273. Individually designed supervised internship, off campus, in community or institutional setting. Developed with advice of faculty mentor. May be repeated for credit up to 12 units if justified skill acquisition and completion of informing evaluation research. (S/U grading only.)— (F, W, S, F, W, S)

298. Group Study (1-5) — Graduate (S/U grading only.)

299. Research (1-12) — Graduate (S/U grading only.)

Human Development
(A Graduate Group)

Katherine J. Conger, Ph.D., Group Chairperson
Group Office. 1315 Hart Hall 530-754-4109; http://humandevelopment.ucdavis.edu

Faculty

Len Abbeduto, Ph.D., Professor (Psychiatry and Behavioral Sciences and Director, M.I.N.D. Institute)

Joy Belsky, Ph.D., Distinguished Professor (Human Ecology)

Zhe Chen, Ph.D., Professor (Human Ecology)

Daniel E. Choe, Ph.D., Assistant Professor (Human Ecology)

Katherine J. Conger, Ph.D., Professor (Human Ecology)

Nancy Erbstein, Ph.D., Assistant Researcher (Human Ecology)

Emilio Ferrer, Ph.D., Professor (Psychology)

Lorena Garcia, M.F.C.P.H., Dr.F.P.H., Assistant Professor (Public Health Science and Community Health)

Kevin Ge, Ph.D., Assistant Professor (Education)

Beth Goodlin-Jones, Ph.D., Associate Professor (Psychiatry, M.I.N.D. Institute)

Gail Goodman, Ph.D., Professor (Psychology)

Katharine Graf Estes, Ph.D., Associate Professor (Psychology)

Amarendu Goyal, Ph.D., Professor (Human Ecology, Center for Mind and Brain)

Randy Hagerman, M.D., Professor (M.I.N.D. Institute)

Rabin L. Hansen, M.D., Professor (Pediatrics)

Paul Hastings, Ph.D., Professor (Psychology)

David Hessl, Ph.D., Associate Clinical Professor (Psychiatry, M.I.N.D. Institute)

Leah Hibel, Ph.D., Associate Professor (Human Ecology)

Ladson Hinton, M.D., Professor (Psychiatry and Behavioral Sciences)

Suad Joseph, Ph.D., Professor (Anthropology)

Penelope Knapp, M.D., Professor (Psychiatry, M.I.N.D. Institute)

Swee Loo, Ph.D., Assistant Professor (Human Ecology)

McDonald Craig, M.D., Professor (Physical Medicine Rehabilitation)

Lisa Miller, Ph.D., Professor (Human Ecology)

Peter Mundy, Ph.D., Professor (Education, M.I.N.D. Institute)

Adrienne Nishina, Ph.D., Associate Professor (Human Ecology)

Lisa Oakes, Ph.D., Professor (Psychology, Center for Mind and Brain)

Beth A. Ober, Ph.D., Professor (Human Ecology)

Lenna Ontai, Ph.D., Associate Specialist in Cooperative Extension (Human Ecology)

Susan Rivera, Ph.D., Professor (Psychology, Center for Mind and Brain)

Richard W. Robins, Ph.D., Professor (Psychology)

Sally Rogers, Ph.D., Professor (Psychiatry, M.I.N.D. Institute)

Julie Schweitzer, Ph.D., Associate Professor (Psychiatry, M.I.N.D. Institute)

Phillip Shaver, Ph.D., Professor (Psychology)

Martin Smith, Ph.D., Specialist in Cooperative Extension (Human Ecology)

Emily Solari, Ph.D., Assistant Professor (Education)

Marjorie Solomon, Ph.D., Associate Professor (Psychiatry and Behavioral Sciences; M.I.N.D. Institute)

Tamaa Swaab, Ph.D., Associate Professor (Psychology)

Ross A. Thompson, Ph.D., Professor (Psychology)

Susan Timmer, Ph.D., Clinical Specialist in Pediatrics (Yuko Uchikoshi Tonkovich, Assistant Professor (Education)

Brian Trainer, Ph.D., Associate Professor (Psychology)

Kali Trzesniewski, Ph.D., Associate Specialist in Cooperative Extension (Associate Director of Research for statewide Youth Development Program; Human Ecology)

Anthony Urrutia, Ph.D., Psychologist in Pediatrics (Karen Watson-Gegeo, Ph.D., Professor (Education))

Distinquished Graduate Mentorship Award

Affiliated Faculty

Kristin Alexander, Ph.D., Associate Professor (California State University, Sacramento)

Keith Widaman, Ph.D., Professor (UC Riverside, Psychology)

Graduate Study, The interdisciplinary and inter-departmental Graduate Group in Human Development offers a program of study leading to the Ph.D. degree. The program provides lifespan study of human behavioral development, with a balance of emphasis on biological, cognitive, and socio-emotional development in context. Recipients of the degree will be prepared to teach, to conduct research, and to be actively involved in public service in human behavioral development. Applicants seeking admissions and fellowships consideration must submit all materials by our priority December 15 deadline. The final admissions deadline is March 1. See our website for more details.

Graduate Adviser, Contact the Group office.

Human Ecology

Formerly Human and Community Development

(College of Agricultural and Environmental Sciences)

Luis E. Guarnizo, Ph.D., Community and Regional Development Program, Chairperson of the Department

Lisa Miller, Ph.D., Human Development and Family Studies Program, Vice-Chairperson of the Department

Department Advising Office. 1303 Hart Hall 530-752-2244, 530-752-1805; http://hec.ucdavis.edu

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Catherine Brinkley, V.M.D., Ph.D., Assistant Professor (Human Ecology)

Ryan Gaff, Ph.D., Associate Professor (Human Ecology)

Luis E. Guarnizo, Ph.D., Professor (Human Ecology)

Martin F. Kenney, Ph.D., Professor (Human Ecology)

William Lacy, Ph.D., Professor (Human Ecology)

Jonathan London, Ph.D., Associate Professor (Human Ecology)

Thomas Tomich, Ph.D., Professor (Human Ecology)

M. Anne Visser, Ph.D., Assistant Professor (Human Ecology)