COLLEGE OF EDUCATION
UT AUSTIN

Applied Learning & Development Degree
Course Work Descriptions

ALD 320 Cognition, Human Learning, and Motivation
(Prerequisite: PSY 301)
Current and classical theories concerning conditioning paradigms, learning and remembering, attention, knowledge representation and retrieval, comprehension and production of language, problem solving, and the ways emotion influences learning.

ALD 321 Play in Early Childhood Development
(Prerequisite: PSY 301)
Theoretical and empirical bases for observing children in play; cognitive, social, and communicative stages related to developmental theory; children's adjustment related to social and emotional theories; motivational value of play. Three lecture hours a week for one semester, with fieldwork to be arranged.

ALD 322 Individual Differences
(Prerequisite: PSY 301)
Introduction to individual differences among people through the life spans. Examines areas of exceptionality within the context of typical development: current research trends; theoretical and legal considerations; and practice-related issues including family involvement, cultural and linguistic diversity, and educational perspectives. Orientation to assistive technology. Three lecture hours a week for one semester, with fieldwork hours to be arranged. Required for certification in generic special education.

ALD 324 Literacy Acquisition
(Prerequisite: PSY 301)
Processes of becoming literate; cognitive insights that move a child to literacy; relationships between reading and writing and among individual characteristics, social factors, and literacy growth. This course or Psychology 338K is required for the reading specialization.

ALD 325 Second Language Acquisition
(Prerequisite: PSY 301)
Acquisition by children or adults of English as a second language. Simultaneous acquisition of two languages, adding a second language, language processing, order of acquisition, role of the first language. Required for certification in bilingual education.

ALD 327 Sociocultural Influences on Learning
(Prerequisite: PSY 301)
Human learning in multisocial, multilingual, and multicultural contexts; realities of society and their impact on learning; social concerns such as prejudice, stereotyping, cross-cultural attitudes, bilingual issues, parent and community involvement. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only.

GRG 301C The Natural Environment
Geomorphic processes that shape the earth's surface; origin and evolution of landforms. Groundwater and water resources. Pedogenesis and soil properties. Three lecture hours and one and one-half laboratory hours a week for one semester, and a one-day field trip.

HDF 313 Child Development
(Prerequisite: PSY 301 and concurrent enrollment in HDF 113L)
Motor, language, cognitive, social, and emotional development in the family context.

HDF 113L Child Development Laboratory
(Prerequisite: PSY 301 and concurrent enrollment in HDF 313)
Students observe children at the University Child and Family Laboratory and relate their observations to the issues discussed in HDF 313. One and one-half laboratory hours a week for one semester.

HED 329 Child and Adolescent Health.
(Prerequisite: A major in Applied Learning and Development or Kinesiology or consent of the instructor)
Health behavior issues affecting the growth and development of children and adolescents.

KIN 314 Children's Movement
(Prerequisite: 15 semester hours of college coursework)
Scientific bases for motor performances; principles for developing physical adequacy in children. Three lecture hours and three laboratory hours a week for one semester, including off-campus observation of children's movement programs.

INF 322T Children's Literature
(Prerequisite: 45 semester hours)
A survey course in the evaluation, selection, and proper and creative use of books and other media with children. Forms and content of literature for children. Extensive reading of children's books. Intended to help the student develop a frame of reference for working with children's materials.

M 302 Introduction to Mathematics
(No prerequisite)
Introduction to Mathematics is a terminal course satisfying the University's general-education requirement in mathematics. Topics may include: number theory (divisibility, prime numbers, the Fundamental Theorem of Arithmetic, gcd, Euclidean Algorithm, modular arithmetic, special divisibility tests), probability (definition, laws, permutations and combinations), network theory (Euler circuits, traveling salesman problem, bin packing), game theory. Some material is of the instructor's choosing.

M 303D Applicable Mathematics
(Prerequisite: ML1 score of 430, or C in M 301)
The course treats some of the techniques, which allow mathematics to be applied to a variety of problems. It is designed for the non-technical student who needs an entry level course developing such mathematics skills. Topics include: linear and quadratic equations, systems of linear equations, matrices, probability, statistics, exponential and logarithmic functions, and mathematics of finance.

M 305G Elementary Functions & Coordinate Geometry
(Prerequisite: ML1 score of 480, or C in M 301)
M305G is intended as an introduction to the functions that are studied in more detail in the calculus sequence. The course covers sets, algebra of functions, inverse functions, logarithms, exponential functions, trigonometric functions, inverse trigonometric functions, polynomials, and the range, do-main and graphs of these functions. Students with four years of high school math who require calculus in their degree plans should seek careful advice before taking this course. It may turn out to be a review and not necessary for these students.

M 316 Elementary Statistical Methods
(Prerequisite: ML1 score of 430, or C in M 301)
Graphical presentation, frequency functions, distribution functions, averages, standard deviation, variance, curve-fitting, and related topics.

M 316K Foundations of Arithmetic
(Prerequisite: M302, 303D, 305G or 316)
An analysis, from an advanced perspective, of the concepts and algorithms of arithmetic, including sets; numbers; numeration systems; definitions, properties, and algorithms of arithmetic operations; and percents, ratios, and proportions. Problem solving is stressed.

M 316L Foundations of Geometry, Probability and Statistics
(Prerequisite: M 316K)
An analysis, from an advanced perspective, of the basic concepts and methods
of geometry, statistics, and probability, including representation and analysis of data; discrete probability, random events, and conditional probability; measurement; and geometry as approached through similarity and congruence, through coordinates, and through transformations. Problem solving is stressed.

PSY 301 Introduction to Psychology
This class is designed to acquaint the student with research and theory in a variety of areas of psychology. The course will cover biopsychology, consciousness, learning, cognition, intelligence, personality, development, abnormal, clinical and social.

PSY 304 Child Psychology
(Prerequisite: PSY 301 with a grade of at least C)
In this course the changes that begin in infancy and continue through adulthood will be studied. Current theoretical perspectives and research methods will serve as starting points for both physiological and behavioral change. Also considered will be the special "tasks" of the developing human: language acquisition, concept formation, interpreting others' behavior, etc.