College of Public Health and Human Sciences

Lifelong health and well-being for every person, every family, every community.

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College of Public Health and Human Sciences

Inspired by our mission as a leading land grant university, we create
synergy in teaching, research, and outreach to develop the next
generation of globally minded public health and human sciences
professionals. Through interdisciplinary research and innovative
curricula, we advance knowledge, policies, and practices that improve
population health in communities across Oregon and beyond.

The College of Public Health and Human Sciences offers a
comprehensive array of undergraduate and graduate education programs
under the public health umbrella.

Our graduates are employed in a wide variety of research, education,
service, management, and leadership positions in business, government,
industry, education, and agencies related to health, nutrition, education,
community development, and family relationships.

The college's scholarly and creative work improves the lives of
individuals, families, and communities. Reflecting the strength and
diversity of our faculty and disciplines, this work includes laboratory-
based investigations of nutrition and physiology.

Our outreach and engagement initiatives and programs serve individuals,
families, professionals, and communities across the campus, Oregon,
the nation, and the world. This outreach includes OSU Extension's Family
and Community Health program, active continuing education initiatives
ranging from credit and noncredit courses to full degrees, and service
programs that serve OSU students, faculty, staff, as well as individuals
and families.

Degree Programs

Advanced degrees include the Master of Public Health (MPH), the Master
of Science (MS), the Master of Athletic Training (MATRN), the Master
of Adapted Physical Education (MAPE) and Doctor of Philosophy (PhD). The
MS and PhD degrees are offered in units of the college. Most units also
participate in the Master of Arts Interdisciplinary Studies (MAIS) graduate
degree program.

Advising

The Office of Academic Advising is a primary source of information for all
College of Public Health and Human Sciences undergraduate students.
Students receive accurate, thorough, and timely information regarding
their degree requirements, academic progress, job opportunities, and
farm activities. Professional advisors oversee the undergraduate
students within the college. Faculty members also serve a vital role to
undergraduates by providing professional and career advice. Faculty
members often involve students in research and professional activities
that create opportunities for leadership, personal growth, and discovery.

Internships and Practicums

To help prepare students in the College of Public Health and Human
Sciences for careers, many of the degree programs include internships
and/or practicum experiences as part of their academic programs.
These opportunities provide students with invaluable work experience
in their field of study and may lead to postgraduate employment.
Faculty members help place students and assist in the structure
of these experiences. Additional information is available at http://
health.oregonstate.edu/internships.

Double Degrees

Undergraduates with majors in the College of Public Health and Human
Sciences can earn a second degree in education, innovation
management, international studies, or sustainability. See the College of
Education, College of Business, International Programs or Department
of Forest Ecosystems and Society sections of this catalog for more
information.

Scholarships

The College of Public Health and Human Sciences offers a variety of
scholarships to deserving students. Many are reserved for students
in designated majors or for first-year students. A list of scholarships
and application forms are available from the college's website at http://
health.oregonstate.edu/students/current/undergraduate/scholarships.

Additional scholarship information is also available at the OSU Office
of Financial Aid and Scholarships.

College Requirements

A grade of C– or higher is required for all courses in a student's
undergraduate program of study.
• This includes all courses and associated prerequisite courses in a student’s undergraduate program of study for a major, minor or certificate as listed in the online course catalog.
• Some programs have additional grade and/or GPA criteria, which must be met in addition to this grade policy.
• Baccalaureate core courses are not subject to this policy unless they serve as courses required in or prerequisites for a student’s major, minor, or certificate.

Effective calendar year 2017-2018 (June 2017–May 2018):
The College of Public Health and Human Sciences does not accept third-course attempts either at the university or transferred in from other institutions to meet individual course requirements within any major effective Fall term 2014.
• Third or subsequent attempts taken prior to Fall term 2014 may be considered to meet major program of study requirements.¹

¹ The Exercise and Sport Science and Athletic Training majors stopped allowing third or subsequent course attempts effective Fall term 2013.

Undergraduate Programs
MAJORS
  Options:
  • Pre-Therapy and Allied Health (https://catalog.oregonstate.edu/college-departments/public-health-human-sciences/school-biological-population-health-sciences/kinesiology-bs-hbs/pre-therapy-allied-health-option)
  Options:
  • Pre-Dietetics (https://catalog.oregonstate.edu/college-departments/public-health-human-sciences/school-biological-population-health-sciences/nutrition-bs-hbs/pre-dietetics-option)
• Pre-Nutrition (https://catalog.oregonstate.edu/college-departments/public-health-human-sciences/school-biological-population-health-sciences/pre-nutrition)

Options:
• Early Childhood

Options:

MINORS
• Public Health
CERTIFICATES


Graduate Programs

Majors


Options:

Options:
- Epidemiology (http://catalog.oregonstate.edu/college-departments/public-health-human-sciences/other-degrees-programs/public-health-mph-phd/epidemiology-option)
- Health Promotion and Health Behavior (http://catalog.oregonstate.edu/college-departments/public-health-human-sciences/other-degrees-programs/public-health-mph-phd/health-promotion-health-behavior-option)
- Public Health Practice

Minors


Certificates


Health and Human Sciences

HHS 231. **LIFETIME FITNESS FOR HEALTH.** (2 Credits)
Provides up-to-date and relevant health and wellness information; practical strategies to implement positive behavior change in physical activity, nutrition, and stress management throughout college and the lifespan. (Bacc Core Course)
Attributes: CSFT – Core, Skills, Fitness
Equivalent to: HHS 231H

HHS 231H. **LIFETIME FITNESS FOR HEALTH.** (2 Credits)
Provides up-to-date and relevant health and wellness information; practical strategies to implement positive behavior change in physical activity, nutrition, and stress management throughout college and the lifespan. (Bacc Core Course)
Attributes: CSFT – Core, Skills, Fitness; HNRS – Honors Course
Designator
Equivalent to: HHS 231
HHS 241. *LIFETIME FITNESS. (1 Credit)
Assessment, evaluation and practice of physical fitness and health behaviors leading to the development of a personal fitness program. (Bacc Core Course)
Attributes: CSFT – Core, Skills, Fitness

HHS 513. INTEGRATED APPROACH TO PUBLIC HEALTH I. (6 Credits)
An integrated approach to introduce students to the core knowledge and methods used in public health, including evidence-based approaches to public health, public health and health care systems, planning and management to promote health, and policy in public health. This course is the first of a two-part course sequence.

HHS 514. INTEGRATED APPROACH TO PUBLIC HEALTH II. (6 Credits)
An integrated approach to introduce students to the core knowledge and methods used in public health, including: evidence-based approaches to public health; public health and health care systems; planning and management to promote health; and policy in public health. This course is the second of a two part course sequence.
Prerequisites: HHS 513 with B- or better

HHS 517. CASE STUDIES IN PUBLIC HEALTH PRACTICE. (3 Credits)
Case-based learning to illustrate the complexity of public health issues and to demonstrate the need for integrated approaches for developing and implementing successful strategies in public health practice. Students will apply a wide range of knowledge and skills essential to public health practice that relate to outbreak investigation, policy analysis, regulatory decision-making, ethics, program development, program evaluation, research synthesis, screening programs, working with stakeholders, health risk communication, and disaster preparedness.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better

HHS 526. LINEAR REGRESSION IN PUBLIC HEALTH. (2 Credits)
Biostatistical tools for scientific applications in public health using linear regression analysis. Confounding, effect modification, variable selection, assessing model fit, observational studies, and exploratory data analysis. Emphasis on the use of statistical packages for analyzing public health data.
Prerequisites: H 524 with B- or better
This course is repeatable for 4 credits.

HHS 527. LOGISTIC REGRESSION IN PUBLIC HEALTH. (2 Credits)
Biostatistical tools for scientific applications in public health using logistic regression analysis. Confounding, effect modification, variable selection, assessing model fit, exploratory data analysis, and observational studies. Emphasis on the use of statistical packages for analyzing public health data.
Prerequisites: H 524 with B- or better

HHS 537. EVIDENCE-BASED LEADERSHIP IN PUBLIC HEALTH. (3 Credits)
Examines how collaboration differs from working together, and offers opportunities to develop skills for successful and effective group functioning. Students will be challenged to examine personal strengths (and the strengths of others) as they relate to leadership and followership. Explores evidence-based management – identifying and using organizational and scientific data in decision making.
Prerequisites: H 536 with B- or better

HHS 550. COMMUNICATING FOR PUBLIC HEALTH POLICY IMPACT. (3 Credits)
Successful public health professionals communicate clearly and in compelling ways with non-scientific audiences. In this hands-on course, the theory and practice of effective public health communication will be explored, with a focus on advancing a public health policy. Through a selected public health policy topic, students will develop and enhance skills in planning and implementing impactful public health communications, including message development, data visualization, media interviewing, engaging through social media and presenting to policymakers. Professionals in the field, including those in legislative and media roles, will share examples of effective communication and provide constructive feedback on students’ work.

HHS 578. EVIDENCE-BASED PUBLIC HEALTH I. (3 Credits)
Evidence-based public health is the process of integrating science-based interventions with community preferences to improve the health of populations. This is the first in a two-course series and provides theoretical and practical bases to identify, implement and evaluate evidence-based research (i.e. programs, surveillance, policies). Students will develop skills to select and adapt evidence-based public health programming for a specific community and/or population.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better

HHS 579. EVIDENCE-BASED PUBLIC HEALTH II. (3 Credits)
Evidence-based public health is the process of integrating science-based interventions with community preferences to improve the health of populations. This is the second in a two-course series. This course applies science and adaptation frameworks learned in the first course to the development of a program plan. This course provides instruction and application of program planning and program evaluation frameworks. Course learning is synthesized through the development of a grant proposal for adapted public-health program plus evaluation plan.
Prerequisites: HHS 575 with B- or better and HHS 578 [B-]

HHS 584. SURVEILLANCE AND FIELD EPIDEMIOLOGY FOR PUBLIC HEALTH. (3 Credits)
A review of public health surveillance systems, and the continuum of communicable disease surveillance into field epidemiology and other responses to identified events.
Prerequisites: H 524 with B- or better or HHS 514 with B- or better

HHS 590. PUBLIC HEALTH LAW. (2 Credits)
Explores the use of law and policy tools to promote access to health and healthy living conditions. Examines the legal powers and duties of government at the federal, state, and local levels to ensure the conditions required for people to be healthy. Discussion of individual rights as limitations on the power of the government to act in furtherance of public health goals.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better

HHS 597. GLOBAL HEALTH SYSTEMS. (3 Credits)
Explores key components of global health systems, using case studies of institutions, processes, and health outcomes.

Human Development and Family Sciences

HDFS 107. INTRODUCTION TO HUMAN SERVICES. (3 Credits)
An exploration of the human services profession. Emphasis on prevention and early intervention concepts and programs. Development of internship search skills, including an introduction to a wide range of human services organizations.

HDFS 199. SPECIAL PROJECTS. (1-16 Credits)
Special projects designed with instructor Graded P/N.
This course is repeatable for 16 credits.
HDFS 201. *CONTEMPORARY FAMILIES IN THE U.S.. (3 Credits)
An introduction to families with application to personal life. Focuses on diversity in family structure, social class, race, gender, work and other social institutions. (Bacc Core Course)
Attributes: CPDP – Core, Perspective, Difference/Power/Discrimination; CPSI – Core, Pers, Soc Proc & Inst

HDFS 209. HUMAN SERVICES PRACTICUM. (4 Credits)
Field experience to learn, primarily through observation, how to apply human service strategies and skills to helping individuals and families served by professional agencies. Supervision by agency and instructor. Requires 90 hours of work on-site. Seminar introduces basic theories and skills through readings, discussion and reflective exercises.
Prerequisites: HDFS 107 with C- or better
This course is repeatable for 8 credits.

HDFS 240. *HUMAN SEXUALITY. (3 Credits)
Physiological, psychological, social, and historical influences on sexuality; emphasis on developmental and relationship aspects. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst

HDFS 262. INTRODUCTION TO HUMAN SERVICES. (3 Credits)
An exploration of the human services profession. Emphasis on prevention and early intervention concepts and programs. Development of internship search skills, including an introduction to a wide range of human services organizations.

HDFS 299. SPECIAL TOPICS. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 310. HUMAN SERVICES PRACTICUM. (4-8 Credits)
Field experience to learn, primarily through observation, how to apply human service intervention strategies and skills to helping individuals and families served by professional agencies and organizations. Supervision by agency and instructor. Requires 90 hours of work on-site. Supplementary bi-weekly seminar, readings, and reports. Lab/rec. Taught on the OSU-Cascades campus only.
Prerequisites: HDFS 262 with C- or better
Equivalent to: HDFS 209

HDFS 311. INFANT AND CHILD DEVELOPMENT. (4 Credits)
Research and theory on development from infancy through middle childhood. Discussion of biological, familial, and sociocultural influences. Development of skills in observing children's behavior.

HDFS 312. PARENTING RESEARCH AND APPLICATION. (4 Credits)
Research and theory regarding parenting and parent education, including parenting styles and practices, discipline, parent-child interactions, attachment, and the family context with an emphasis on professional implications for promoting child health and well-being.

HDFS 313. ADOLESCENT DEVELOPMENT. (4 Credits)
Advanced theories and research on physical, social and psychological development during adolescence; emphasizes influences of family, peers, schools and community.

HDFS 314. ADULT DEVELOPMENT AND AGING. (4 Credits)
Advanced theories and research related to developmental changes and stability in early, middle, and late adulthood. Gender issues, personality, cognition, and adaptation.

HDFS 330. FOSTERING LEARNING IN EARLY CHILDHOOD DEVELOPMENT. (4 Credits)
Development of skills in applying theoretical approaches to observing, recording, and interpreting the behavior of young children in order to design interactions that support learning in group settings.
Prerequisites: HDFS 311 with C- or better

HDFS 331. DIRECTED EXPERIENCE IN EARLY CHILDHOOD. (3 Credits)
Placement in early childhood program to focus on guidance techniques, classroom management, and implementation of curricula, based on developmental observation, research, and theory. Supplementary weekly seminar, readings, and reports. Lab/rec. Taught on the OSU-Cascades campus only.
Prerequisites: (HDFS 311 with C- or better or HDFS 211 with C- or better) and HDFS 330 [C-]

HDFS 341. FAMILY STUDIES. (4 Credits)
Study of family forms, family formation, and family change over the human life course is sociohistorical, economic, political, and cultural context.

HDFS 360. CRITICAL THINKING IN HUMAN DEVELOPMENT AND FAMILY SCIENCES. (4 Credits)
Explores foundations of critical thinking, especially methods for sustaining open-minded inquiry and evaluating evidence and arguments. Current controversies in human development and family policy are targets of debate.

HDFS 361. APPLIED RESEARCH METHODS. (4 Credits)
Basic research methods as they are applied in human development and family studies.

HDFS 399. SPECIAL TOPICS. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 401. RESEARCH. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 402. INDEPENDENT STUDY. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 403. THESIS. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 404. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 405. SEMINAR. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 406. PROJECTS. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 407. SEMINAR. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 408. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 410. HUMAN SERVICES INTERNSHIP. (6-12 Credits)
Field experience to apply theory and evidence-based practices to individual, family, and community problems in professional settings. Supervision by agency and instructor. Requires 300 hours of work on-site. Seminar includes reflection and constructive criticism processes. Can be taken across 2 consecutive terms (150 hours each) within the same agency. Graded P/N.
Prerequisites: HDFS 107 with C- or better and HDFS 209 [P] and HDFS 462 [C-]
This course is repeatable for 12 credits.

HDFS 430. *STUDENT TEACHING IN EARLY CHILDHOOD DEVELOPMENT AND EDUCATION. (12 Credits)
Participation in a research-based model early childhood program focused on student teaching, program development and evaluation, parent education and administration. Placement to be reserved one year in advance. Lec/lab. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisites: HDFS 330 with C- or better
HDFS 431. FAMILY, SCHOOL, AND COMMUNITY COLLABORATION. (3 Credits)
Focus on family, school, community environments and interactions for children from infancy to adolescence. Resources and skills for enhancing child development across these settings are emphasized.
Prerequisites: HDFS 311 with C- or better or HDFS 313 with C- or better

HDFS 432. CHILDREN AND YOUTH WITH SPECIAL NEEDS. (3 Credits)
Developmental, educational, and family issues related to children and youth with disabilities and giftedness.

HDFS 433. CHILD BEHAVIORAL SUPPORT IN GROUP SETTINGS. (10 Credits)
Students will complete an internship in a Pre-Kindergarten, Kindergarten or First Grade classroom and will focus on curriculum development, implementation and evaluation, individualizing for diverse student needs and communication with students.
Prerequisites: HDFS 311 with C- or better and HDFS 330 [C-] and HDFS 331 [C-]

HDFS 444. FAMILY VIOLENCE AND NEGLECT. (4 Credits)
Examination of the causes and consequences of family abuse and neglect, including child abuse, domestic violence and elder abuse.

HDFS 447. *FAMILIES AND POVERTY. (4 Credits)
Examines families in poverty focusing on causes and consequences of family poverty, including global economic factors, migration patterns, discrimination, and policies and programs for families. Community service required. (Bacc Core Course)
Attributes: CSGI – Core, Synth, Global Issues
Equivalent to: HDFS 447H

HDFS 447H. *FAMILIES AND POVERTY. (4 Credits)
Examines families in poverty focusing on causes and consequences of family poverty, including global economic factors, migration patterns, discrimination, and policies and programs for families. Community service required. (Bacc Core Course)
Attributes: CSGI – Core, Synth, Global Issues; HNRS – Honors Course Designator
Equivalent to: HDFS 447

HDFS 460. FAMILY POLICY. (4 Credits)
Family policies aim to protect, promote, and strengthen families by addressing one or more of the five explicit functions families perform: (a) family formation, (b) partner relationships, (c) economic support, (d) childrearing, and (e) caregiving. This course will explore the relationships between family policies and family functioning using state, federal, and international policy examples. By reviewing theoretical frameworks for conceptualizing family policy, students will assess the consequences policy makers may have for family well-being.

HDFS 461. *PROGRAM DEVELOPMENT AND PROPOSAL WRITING. (4 Credits)
Principles of program development and evaluation applied to the development of a proposal for a human services program; analysis of needs and resources, identification of empirically-based strategies, and assessment. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisites: HDFS 360 with C- or better and HDFS 361 [C-]

HDFS 462. PROFESSIONAL HELPING SKILLS. (4 Credits)
Exploration of collaborative, strengths-based methods to resolve individual, family, and community problems. Application of ethical standards to case study, with emphasis on the values of human dignity and social justice. Development of basic helping skills within an empowerment framework.
Prerequisites: HDFS 262 with C- or better and HDFS 310 [P]

HDFS 465. TOPICS IN HUMAN DEVELOPMENT AND FAMILY SCIENCES. (3 Credits)
Topics and issues in human development and family sciences. Examples: children and the law; gender and families; parenting; aging; relationship development across the lifespan.
Equivalent to: HDFS 465H
This course is repeatable for 18 credits.

HDFS 465H. TOPICS IN HUMAN DEVELOPMENT AND FAMILY SCIENCES. (3 Credits)
Topics and issues in human development and family sciences. Examples: children and the law; gender and families; parenting; aging; relationship development across the lifespan.
Attributes: HNRS – Honors Course Designator
Equivalent to: HDFS 465
This course is repeatable for 18 credits.

HDFS 499. SPECIAL TOPICS. (1-16 Credits)
Equivalent to: HDFS 499H
This course is repeatable for 16 credits.

HDFS 499H. SPECIAL TOPICS. (1-16 Credits)
Attributes: HNRS – Honors Course Designator
Equivalent to: HDFS 499
This course is repeatable for 16 credits.

HDFS 501. RESEARCH. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 502. INDEPENDENT STUDY. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 503. THESIS. (1-16 Credits)
This course is repeatable for 999 credits.

HDFS 505. READING AND CONFERENCE. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 506. SPECIAL PROBLEMS/SPECIAL PROJECTS. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 507. SEMINAR. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 508. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 509. PRACTICUM. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 510. INTERNSHIP. (3-15 Credits)
This course is repeatable for 16 credits.

HDFS 511. THEORIES OF HUMAN DEVELOPMENT. (4 Credits)
Critical examination of significant theories of human development. Emphasizes evolution of theories and impact on current human development research.
HDFS 516. CHILD DEVELOPMENT. (4 Credits)
Study of theories, concepts, and issues related to physical, cognitive, social, and emotional development in infants and children. Covers family contexts, risk and resilience, nature/nurture issues, critical/sensitive periods, the importance of early experience, and the relationship between basic and applied research.

HDFS 517. ADOLESCENT DEVELOPMENT. (4 Credits)
Study of theories, concepts, and issues related to biological, cognitive, social, and emotional development in adolescents. Covers identity formation, family contexts, adolescent sexuality, societal contexts for adolescent development, and risk and resilience processes.

HDFS 518. ADULT DEVELOPMENT AND AGING. (4 Credits)
Study of theories, concepts, and issues related to biological, cognitive, social, and emotional development throughout adulthood. Covers life transitions, stress-related growth, optimal aging, wisdom, and developmental methods.

HDFS 519. THE LIFE COURSE. (4 Credits)
Introduces students to key concepts, principles, and controversies in life-course studies. Emphasizes how the nature and rhythm of the life course is structured by time and place. Examines how the lives of individuals and groups are shaped by history, demography, social institutions, states and policies, and culture.

HDFS 520. INTRODUCTORY DATA ANALYSIS WITH SAS. (1 Credit)
Introduction to basic statistical concepts and the use of the SAS software for data analysis. Graded P/N.

HDFS 530. RESEARCH IN HUMAN DEVELOPMENT AND FAMILY SCIENCES I. (4 Credits)
An overview of research design, measurement, sampling and evaluation research. Introduces computer applications for data collection and analysis. Lec/lab.

HDFS 531. APPLIED QUANTITATIVE METHODS I: ANOVA. (4 Credits)
Principles and application of general linear models for categorical predictors and repeated measures designs (e.g., ANOVA).
Prerequisites: HDFS 529 with B- or better

HDFS 532. APPLIED QUANTITATIVE METHODS II: LINEAR REGRESSION. (4 Credits)
Principles and application of general linear models for continuous predictors (e.g., multiple regression).
Prerequisites: HDFS 531 with B- or better

HDFS 533. SOCIAL POLICY AND HUMAN DEVELOPMENT. (4 Credits)
Probes how policies and governments affect human development over the life course. Examines experiences in family, education, work, and health. Families are a central lens for examining effects. Offered alternate years.
Equivalent to: HOEC 533

HDFS 534. SOCIAL PROGRAM AND POLICY EVALUATION. (4 Credits)
Models of evaluation and application of applied research methods to social programs and policies.
Prerequisites: HDFS 531 with C or better

HDFS 538. QUALITATIVE RESEARCH METHODS I. (4 Credits)
Critical survey of qualitative approaches in social science research. Examines historical roots, epistemological perspectives, and ethical issues. Includes ethnographic and observational methods, interview, grounded theory, case study, and participatory approaches.

HDFS 539. QUALITATIVE METHODS II. (4 Credits)
Critical survey of qualitative approaches in social science research. Examines historical roots, epistemological perspectives, and ethical issues. Includes ethnographic and observational methods, interview, grounded theory, case study, and participatory approaches. Application of qualitative methods through completion of a qualitative research project.
Prerequisites: HDFS 538 with C or better

HDFS 541. FAMILY STUDIES. (4 Credits)
Critical survey of current research in family studies with a focus on diverse family structures and processes.

HDFS 546. THEORIES OF FAMILY STUDIES. (4 Credits)
An overview of the major theoretical perspectives used in the study of families. Issues of theory construction and evaluation are also covered. Course goal is to enable the student to apply conceptual frameworks to a particular area of interest.

HDFS 547. FAMILIES AND POVERTY. (3 Credits)
Examines families in poverty focusing on causes and consequences of family poverty, including global economic factors, migration patterns, discrimination, and policies and programs for families.

HDFS 555. TOPICS IN HUMAN DEVELOPMENT AND FAMILY SCIENCES. (3 Credits)
Topics and issues in human development and family sciences. Examples: children and the law; gender and families; parenting; aging; relationship development across the lifespan.
This course is repeatable for 18 credits.

HDFS 587. SOCIAL GERONTOLOGY. (3 Credits)
An introduction to aging research targeted toward understanding demographics of aging societies, lifespan theories, methods of aging research, psychosocial aging processes, family and caregiving issues, housing and long-term care, and current social policies.

HDFS 601. RESEARCH. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 602. INDEPENDENT STUDY. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 603. DISSERTATION. (1-16 Credits)
This course is repeatable for 999 credits.

HDFS 605. READING AND CONFERENCE. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 606. SPECIAL PROJECTS. (1-6 Credits)
This course is repeatable for 16 credits.

HDFS 607. SEMINAR. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 608. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

HDFS 610. PRACTICUM/INTERNSHIP. (3-15 Credits)
This course is repeatable for 16 credits.

HDFS 616. ADVANCED TOPICS IN CHILD-ADOLESCENT DEVELOPMENT. (3 Credits)
Advanced critical study of theory and research related to specific topics of social, emotional, and cognitive development during infancy, childhood and/or adolescence.
This course is repeatable for 6 credits.
HDFS 617. ADVANCED TOPICS IN ADULT DEVELOPMENT AND AGING. (3 Credits)
Advanced critical study of theory and research related to specific topics of social and emotional development and stability in adulthood, including later life.
This course is repeatable for 9 credits.

HDFS 630. QUANTITATIVE METHODS IN FAMILY AND INDIVIDUAL DEVELOPMENT. (3 Credits)
Advanced quantitative techniques in human development and family studies. Includes longitudinal designs, structural equation modes.
Content varies with each offering.
Prerequisites: HDFS 532 with B- or better
This course is repeatable for 9 credits.

HDFS 639. COMMUNITY-BASED PARTICIPATORY RESEARCH. (4 Credits)
Focuses on initiating and conducting research in partnership with communities. Includes in-depth examination of community-based participatory research (CBPR) elements, principles, theories, and approaches; how researchers can successfully partner with communities; and research with minority and/or underprivileged communities; with examples from environmental health, gerontology, and health promotions.

HDFS 665. TEACHING IN HUMAN DEVELOPMENT AND FAMILY SCIENCES. (1 Credit)
Principles and practices of pedagogy in human development and family sciences related to both on-campus and Ecampsus instruction. Graded P/N.
This course is repeatable for 6 credits.

HDFS 685. RACE, CLASS, CULTURE AND AGING. (4 Credits)
Examines the diversity among the older population in health status, health beliefs/behaviors, and health care, and explores the interaction of culture and structure as determinants of their life chances. The empirical literature used in the course is drawn from the experiences of aging of African-American, Latino, and Asian-Pacific Islander elderly. Taught spring term even years. CROSSTLISTED as H 685.
Equivalent to: H 685

HDFS 699. SPECIAL TOPICS. (1-4 Credits)
This course is repeatable for 8 credits.

HDFS 808. WORKSHOP. (1-16 Credits)
PREREQ: Application to Early Childhood Leadership Directions.
This course is repeatable for 16 credits.

Physical Activity Courses

PAC 100. ADAPTED PHYSICAL ACTIVITY. (1 Credit)
Individual workout for students with permanent or temporary physical disabilities and for students enrolled in another PAC who sustain an injury.
This course is repeatable for 11 credits.

PAC 102. AQUA AEROBICS. (1 Credit)
Fitness class using a variety of movements in shallow and deep water, mostly in a vertical position. Do not need swimming skills.
This course is repeatable for 11 credits.

PAC 103. DEEP WATER FITNESS. (1 Credit)
Fitness class using a variety of movements in a deep water pool, mostly in a vertical position. Should be comfortable in deep water.
This course is repeatable for 11 credits.

PAC 105. CPR-FIRST AID. (1 Credit)
Introduces cardiac and first aid emergency response procedures. Emphasis placed on safe response, chain of survival, quality CPR (adults, children, infants and team responses), use of an AED, medical emergencies, injury emergencies and environmental emergencies. Students successfully completing the American Heart Association certification requirements will be issued a Heartsaver First Aid and BLS (Basic Life Support) for the Healthcare Provider certification at the end of the course.
This course is repeatable for 11 credits.

PAC 106. BEAVER FIT. (1 Credit)
A conditioning class for those of all fitness levels that focuses on mobility, functional movement, and high-intensity interval training as a means to improve cardiovascular fitness, muscular fitness, and flexibility.
This course is repeatable for 11 credits.

PAC 108. STEP AEROBICS. (1 Credit)
Low-impact, high intensity workout adjustable to all fitness levels utilizing adjustable height benches. Strengthening and flexibility exercises included.
This course is repeatable for 11 credits.

PAC 110. INTRODUCTION TO WHITE WATER KAYAKING. (2 Credits)
Students will learn fundamentals of white water kayaking in sheltered water based on the internationally recognized British Canoe (BC) teaching and skills certification system. Emphasis is on activity and basic skills. See class schedule for the location, website, and class schedule specific to the course. This course runs for six class sessions of 3 hours (Fridays), and one mandatory Saturday (5-hour) session. The entire class lasts for six weeks.
This course is repeatable for 11 credits.

PAC 111. INTRODUCTION TO CANOEING. (2 Credits)
Students will learn fundamentals of canoeing in sheltered water based on the internationally recognized British Canoe (BC) teaching and skills certification system. Emphasis is on activity and basic skills. See class schedule for the location, website, and class schedule specific to the course. This course runs for six class sessions of 3 hours (Fridays), and one mandatory Saturday (5-hour) session. The entire class lasts for six weeks.
This course is repeatable for 11 credits.

PAC 112. LEARNING KAYAK ROLLING BASICS. (2 Credits)
Students learn fundamentals of rolling a kayak in an indoor pool-based environment. Emphasis is on activity and basic skills. See class schedule for the location, website, and class schedule specific to the course. This course runs for six class sessions of 3 hours (Fridays), and one mandatory Saturday (5-hour) session. The entire class lasts for six weeks.
This course is repeatable for 10 credits.

PAC 113. BADMINTON I. (1 Credit)
Singles and doubles skills, practice, rules, strategies and play.
This course is repeatable for 11 credits.

PAC 114. BADMINTON II. (1 Credit)
Intermediate skill development in badminton.
This course is repeatable for 11 credits.

PAC 115. OUTDOOR LIVING SKILLS. (2 Credits)
Educates and introduces students on how to travel safely in the backcountry through proper preparation, risk awareness, Leave No Trace ethics, terrain recognition, navigation, and camp craft. Classroom and field (lab) experience. Includes one mandatory weekend overnight outing.
CROSSTLISTED as TRAL 115.
Equivalent to: TRAL 115
This course is repeatable for 4 credits.
PAC 116. BASKETBALL I (MEN/WOMEN). (1 Credit)
Fundamental basketball skills, drills, rules, strategies, and practice. Game play appropriate for the skill level.
Equivalent to: PAC 123
This course is repeatable for 11 credits.

PAC 117. BASKETBALL COMPETITIVE. (1 Credit)
Team play, individual and team skills developed and refined, competitive round robin tournaments.
This course is repeatable for 11 credits.

PAC 118. LABORATORY FOR OUTDOOR LIVING SKILLS. (1 Credit)
Practical field application of concepts learned in TRAL 115/PAC 115, Outdoor Living Skills. Field (lab) experience includes one mandatory weekend overnight. Introduces how to travel safely in the backcountry through proper preparation, risk awareness, Leave No Trace ethics, terrain recognition, navigation, and camp craft. CROSSTLISTED as TRAL 118.
Corequisites: PAC 115
Equivalent to: TRAL 118
This course is repeatable for 2 credits.

PAC 120. MOUNTAIN BIKING. (1 Credit)
Touring trails in Corvallis area; riding techniques, safety, maintenance, environmental concerns. Required equipment: mountain bike, tire repair kit, helmet.
This course is repeatable for 11 credits.

PAC 121. BILLIARDS. (1 Credit)
Skills, technique, strategy, game knowledge as introduction to billiards (pool), a ‘cue’ sport; rules and gaming for variations of pocket billiards; practice and class tournament play.
This course is repeatable for 11 credits.

PAC 122. BODY SCULPTING. (1 Credit)
Fitness workout set to music using lighter resistance training aids such as dumbbells, resistance tubing, bands, and aerobic steps.
This course is repeatable for 11 credits.

PAC 123. BOWLING I. (1 Credit)
Fundamentals of the game including etiquette, spot bowling, natural hook and straight ball delivery, scoring, handicap computation, spare pickup, and error correction. Additional fee; equipment supplied.
This course is repeatable for 11 credits.

PAC 124. BOWLING II. (1 Credit)
Review and refinement of basic fundamentals of bowling. Emphasis on spot bowling, adjusting for lane conditions, choices in equipment, league play, and mental training.
This course is repeatable for 11 credits.

PAC 126. CARDIO KICKBOXING I. (1 Credit)
High intensity group workout set to motivational music and combining skills and techniques from boxing, kickboxing, and other martial arts.
This course is repeatable for 11 credits.

PAC 129. CARDIO COMBO. (1 Credit)
Combination of aerobic training classes that use music such as Cardio Kickboxing, Body Sculpture, Sports Conditioning, and/or Step Aerobics. Actual curriculum may vary with instructors.
Equivalent to: PAC 106
This course is repeatable for 11 credits.

PAC 130. CONDITIONING. (1 Credit)
Total body approach to fitness, cardiorespiratory conditioning, muscular strength and endurance; flexibility emphasized. May follow a specific training format, e.g., ROTC section follows Army conditioning format.
This course is repeatable for 11 credits.

PAC 131. SNOWBOARD-SKI CONDITIONING. (1 Credit)
Strength, muscular endurance, flexibility, balance, and cardiovascular exercises specific to downhill skiing and snowboarding; designed to help prepare students for participation in these sports.
Equivalent to: PAC 108
This course is repeatable for 11 credits.

PAC 133. DANCE: TAP I. (1 Credit)
Individual and group dance with specialized shoes; basic step technique and vocabulary; warm up exercises progressing into rhythmic combinations performed to music; culminates in full routine to music.
This course is repeatable for 11 credits.

PAC 136. DANCE: BALLET I. (1 Credit)
Introduction to basic ballet technique and aesthetics, terminology, alignment, stretch and strength exercises. No previous dance experience needed. Additional fee for accompanist.
This course is repeatable for 11 credits.

PAC 137. DANCE: BALLET II. (1 Credit)
Review and practice of beginning ballet technique, introduction of more advanced stretches, steps, and combinations. Additional fee for accompanist.
This course is repeatable for 11 credits.

PAC 138. DANCE: BALLET III. (1 Credit)
Intermediate and advanced ballet technique, comprehensive exploration of the discipline. Additional fee for accompanist.
This course is repeatable for 11 credits.

PAC 139. HIP HOP DANCE. (1 Credit)
Aerobic/energetic experience consisting of a warm-up/conditioning and choreographic combinations.
This course is repeatable for 11 credits.

PAC 140. DANCE: JAZZ I. (1 Credit)
Introduction to jazz dance, technique, isolations, and combinations. Different jazz styles are explored. No previous dance experience is necessary.
This course is repeatable for 11 credits.

PAC 141. DANCE: JAZZ II. (1 Credit)
Intermediate jazz technique, isolations and combinations.
This course is repeatable for 11 credits.

PAC 145. DANCE: MODERN I. (1 Credit)
Introduction to modern dance movement fundamentals. Technique, stretch, strength, and alignment are included, as well as an appreciation for movement expression. No previous dance experience needed. Additional fee for accompanist.
This course is repeatable for 11 credits.

PAC 146. DANCE: MODERN II. (1 Credit)
An intermediate level of modern dance technique and movement expression. Additional fee for accompanist.
This course is repeatable for 11 credits.

PAC 148. DANCE: CUBAN SALSA I (MEN/WOMEN). (1 Credit)
Foundations of Cuban Salsa (Casino) as well as Rueda de Casino with focus on musical development and fundamentals of leading and following in partner dance.
This course is repeatable for 11 credits.

PAC 149. DANCE: CUBAN SALSA II. (1 Credit)
Higher concepts of Cuban Salsa (Casino) as well as Rueda de Casino, with focus on musical development and fundamentals of leading and following in partner dance.
This course is repeatable for 11 credits.
PAC 150. CULTURAL WORLD DANCE (MEN/WOMEN). (1 Credit)
Introduction to traditional dance forms from Europe, Israel, North America and Asia, focusing on movement, cultural heritage, history, and diversity. This course is repeatable for 11 credits.

PAC 151. COUNTRY LINE DANCE. (1 Credit)
Non-partner dance routines in country western style; musical interpretation, footwork, and sequencing of 20 different routines. This course is repeatable for 11 credits.

PAC 152. DANCE: SALSA I. (1 Credit)
Steps and rhythmic accent of Salsa and Merengue style; fundamentals of leading and following; basic moves and combinations. No prior experience needed.
Equivalent to: PAC 141
This course is repeatable for 11 credits.

PAC 153. DANCE: SALSA II. (1 Credit)
Intermediate moves, rhythmic accents and step combinations of Salsa; development of leading and following.
Prerequisites: PAC 152 with C- or better
This course is repeatable for 11 credits.

PAC 154. DANCE: COUNTRY WESTERN I (MEN/WOMEN). (1 Credit)
Focus on traditional Country Western Swing patterns. Emphasizes fundamentals of leading and following. Also including introduction to waltz, two-step, cowboy cha-cha and 10-step polka.
This course is repeatable for 11 credits.

PAC 155. DANCE: COUNTRY WESTERN II (MEN/WOMEN). (1 Credit)
Build on CW I with advanced waltz, two-step, and cha-cha patterns; introduces schottische and East Coast swing.
This course is repeatable for 11 credits.

PAC 156. DANCE: COUNTRY WESTERN III (MEN/WOMEN). (1 Credit)
Advanced two-step patterns and styling with a focus on musical interpretation; development of leading and following.
Prerequisites: PAC 155 with C- or better
This course is repeatable for 11 credits.

PAC 157. DANCE: BEGINNING SWING (MEN/WOMEN). (1 Credit)
Introduction to single time, double time, and triple time (jitterbug) swing; variations for each style, covering most swing music rhythms. Emphasizes fundamentals of leading and following. Men/women.
This course is repeatable for 11 credits.

PAC 158. DANCE: BALLROOM I (MEN/WOMEN). (1 Credit)
Posture and alignment, fundamentals of leading and following, basic steps and variations for waltz, foxtrot, swing, tango, and cha-cha.
This course is repeatable for 11 credits.

PAC 159. DANCE: BALLROOM II (MEN/WOMEN). (1 Credit)
Additional steps and patterns of popular ballroom dances.
Prerequisites: PAC 159 with C- or better
This course is repeatable for 11 credits.

PAC 160. DANCE: BALLROOM III (MEN/WOMEN). (1 Credit)
Styling; additional dances: rhumba, silver fox trot, and Viennese waltz; advanced dance figures for tango and cha-cha.
Prerequisites: PAC 160 with C- or better
This course is repeatable for 11 credits.

PAC 161. DANCE: SWING II (MEN/WOMEN). (1 Credit)
Social dance focusing on Twenties-style Charleston, pure Balboa and Balboa-Swing, and Blues Dance.
This course is repeatable for 11 credits.

PAC 162. DANCE: SWING I (MEN/WOMEN). (1 Credit)
Latin dances including cha-cha, mambo, salsa, rhumba, merengue, bolero, salsa, and paso doble. Emphasis on proper styling and technical execution of each dance; effective leading and following techniques.
Prerequisites: PAC 159 with C- or better
This course is repeatable for 11 credits.

PAC 163. DANCE: LINDY HOP. (1 Credit)
Ballroom dance style based on original eight-count swing dance evolved in Harlem ballrooms during the late 1920s; styling emphasized.
Prerequisites: PAC 158 with C- or better or PAC 159 with C- or better
Equivalent to: PAC 179
This course is repeatable for 11 credits.

PAC 164. DANCE: LINDY HOP II (MEN/WOMEN). (1 Credit)
Intermediate patterns, syncopations, play techniques, and styling with a focus on musical interpretation in the Lindy Hop style; development of leading and following.
Prerequisites: PAC 167 with C- or better
This course is repeatable for 11 credits.

PAC 165. DANCE: WEST COAST SWING (MEN/WOMEN). (1 Credit)
Focus on style, technique and many different step patterns of the west coast swing dance.
Prerequisites: PAC 154 with C- or better or PAC 159 with C- or better
This course is repeatable for 11 credits.

PAC 166. BALLROOM 2 STEP, HUSTLE (MEN/WOMEN). (1 Credit)
Smooth, romantic social dance that is neither ballroom, Latin, nor swing but a rhythm dance identified as club-style, danced to contemporary ballad-like music. Hustle is fast-paced, swing-related dance to disco beat. Class encompasses intermediate step patterns, technique and styling, stationary, traveling patterns.
Prerequisites: PAC 160 with C- or better
Equivalent to: PAC 178
This course is repeatable for 11 credits.

PAC 167. DANCE: MODERN DANCE. (1 Credit)
Intermediate patterns, syncopations, play techniques, and styling with a focus on musical interpretation in the Lindy Hop style; development of leading and following.
Prerequisites: PAC 167 with C- or better
This course is repeatable for 11 credits.

PAC 168. DANCE: MODERN DANCE II (MEN/WOMEN). (1 Credit)
Intermediate patterns, syncopations, play techniques, and styling with a focus on musical interpretation in the Lindy Hop style; development of leading and following.
Prerequisites: PAC 167 with C- or better
This course is repeatable for 11 credits.

PAC 169. COOL SHOES, BALLROOM PERFORMANCE (MEN/WOMEN). (2 Credits)
Students learn and perform ballroom dance routines on a intermediate level. This course is a full year commitment ending with a dance concert in the spring.
This course is repeatable for 12 credits.

PAC 170. DANCE: WEST COAST SWING II (MEN/WOMEN). (1 Credit)
Intermediate patterns, syncopations, play techniques, and styling with a focus on musical interpretation; development of leading and following.
Prerequisites: PAC 165 with C- or better
This course is repeatable for 11 credits.

PAC 171. DANCE: NEW SHOES. (1 Credit)
IntroduceS students to formation ballroom dancing at a beginning level. Dances learned over the course of this term will be determined by the instructor at the beginning of the term.
Prerequisites: PAC 159 with D- or better
This course is repeatable for 11 credits.
PAC 172. ROCK SITE MANAGEMENT. (2 Credits)
Students will be introduced to a variety of basic skills, gear and systems that will allow them to safely manage and participate in a single pitch rock climbing environment. This class will present students with various technical skills that will serve as a foundation for future land-based outdoor disciplines. Students will be introduced to gear, such as software (ropes, webbing, harnesses) and hardware (carabiners, friction devices); skills, such as knots, belaying, rappelling; and systems such as anchors, raises, lowers. CROSSLISTED as TRAL 172.
Equivalent to: TRAL 172

PAC 174. FLAG FOOTBALL. (1 Credit)
Skill instruction and practice; drills; strategies, game play of American football; emphasis on teamwork and sportsmanship in a competitive but non-threatening or stressful environment.
This course is repeatable for 11 credits.

PAC 178. FLY FISHING I. (1 Credit)
Casting and fishing techniques, lure making, equipment selection, terminology, and regulation for fishing in Oregon's marine environment.
This course is repeatable for 11 credits.

PAC 179. FLY FISHING II. (1 Credit)
Advanced fly casting and fly fishing techniques for trout, fly-tying, equipment selection, basic aquatic organism identification, terminology, and regulations for fishing in Oregon's freshwater environment.
Equivalent to: PAC 167
This course is repeatable for 11 credits.

PAC 180. STEELHEAD FISHING. (1 Credit)
Casting and fishing techniques, lure making, equipment selection, terminology, and regulations for fishing in Oregon's marine environment for steelhead.
This course is repeatable for 11 credits.

PAC 182. DISC GOLF I. (1 Credit)
Techniques for throwing discs; equipment, knowledge, etiquette, and rules associated with playing a disc golf course; experience playing practice and official disc golf courses.
This course is repeatable for 11 credits.

PAC 184. GOLF I. (1 Credit)
Basic fundamental principles in all phases of golf; rules, terminology, etiquette, safety and scoring. Equipment provided.
This course is repeatable for 11 credits.

PAC 185. GOLF II. (1 Credit)
Individual practice and course play; skill refinement as continuation of Golf I. Equipment available. Course play expected, additional fee.
This course is repeatable for 11 credits.

PAC 186. GOLF III. (1 Credit)
Advanced skills, knowledge involved in competitive play. Course play expected, additional fee.
This course is repeatable for 11 credits.

PAC 188. GYMNASTICS. (1 Credit)
Fundamental techniques on vault, bars, beam, and floor.
This course is repeatable for 11 credits.

PAC 189. GYMNASTICS II. (1 Credit)
Build upon previous gymnastics experiences or classes; floor exercise, uneven parallel bars, vault, mini-trampoline and beam apparatus are available.
This course is repeatable for 11 credits.

PAC 190. KARATE. (1 Credit)
Instruction in traditional Japanese karate basic striking and blocking techniques, kata (forms), philosophy, conditioning, and etiquette. Self-defense applications are also emphasized.
This course is repeatable for 11 credits.

PAC 192. JUDO I. (1 Credit)
Skill instruction in landing, throwing and grappling for this style of martial arts; etiquette for practice and competition; basic knowledge of vocabulary, rules and scoring.
This course is repeatable for 11 credits.

PAC 193. JUDO II. (1 Credit)
Intermediate skill instruction in landing, throwing, pins, chokes in Kodokan Judo style; principles of Seiryoku-Zenyou and Jita-Kyouei designed to help individuals become better members of society through training body and mind; instruction for competition knowledge and skills. Judo etiquette for practice and competition expected.
This course is repeatable for 11 credits.

PAC 194. PILATES. (1 Credit)
Non-impact, invigorating approach to physical conditioning and mind/body awareness; helps develop core body strength, improve posture and balance, and increase muscle endurance, tone, flexibility.
This course is repeatable for 11 credits.

PAC 195. PILATES II. (1 Credit)
Progression of Joseph Pilates mat exercises; emphasis on intermediate and advanced levels; application of Pilates' principles to new exercises; use of props; application of principles to daily living.
This course is repeatable for 11 credits.

PAC 197. PICKLEBALL. (1 Credit)
Fast-paced, self-officiated net game with similarities to tennis, badminton, table tennis, and racquetball. Course covers rules, strategies, technique, preparation for play, and includes extensive active practice and play, played with two, three, or four people.
This course is repeatable for 11 credits.

PAC 199. SPECIAL TOPICS. (1-3 Credits)
Experimental or new classes.
This course is repeatable for 11 credits.

PAC 201. RELAXATION. (1 Credit)
Introduction to techniques that promote relaxation of the nervous system. These may include, but are not limited to: meditation, imagery, yoga postures, and self-massage. Students will be encouraged to reflect on how life choices influence their nervous system.
This course is repeatable for 11 credits.

PAC 202. MEDITATION. (1 Credit)
Examine the application of building simple awareness, how to manage thoughts in productive and compassionate ways, and how to transfer these skills into healthy relationships. Explore strategies for managing mental and physical difficulties including anxiety, pain, and overall stress through experiential learning and personal sharing of experiences.
This course is repeatable for 11 credits.

PAC 205. ROWING, CREW I. (MEN/WOMEN). (1 Credit)
Introduction to the sport of rowing; designed for the novice (beginner). Includes basic technique and terminology, related water safety, and development of strength, endurance, and flexibility.
This course is repeatable for 11 credits.

PAC 212. RUNNING, JOGGING. (1 Credit)
Cardiorespiratory fitness with scenic running routes; training, nutrition, and physiology. Beginning and intermediate level.
This course is repeatable for 11 credits.
PAC 213. RUNNING: 10K TRAINING. (1 Credit)
Intermediate to advanced conditioning and training program for road racing.
This course is repeatable for 11 credits.

PAC 214. HALF MARATHON TRAINING. (2 Credits)
Progressive training combining walking, running, core strengthening, interval techniques in preparation for a 13.1 mile (1/2 marathon) event. Open to all levels; may choose to walk, walk/run, or run.
This course is repeatable for 11 credits.

PAC 215. RUGBY, TOUCH. (1 Credit)
Basic skills of open field rugby; emphasis on ball handling and attacking strategy; rules and history; game play.
This course is repeatable for 11 credits.

PAC 217. SELF DEFENSE. (1 Credit)
Nonviolent self-defense. Develop self-confidence and skills for assault situations. Conditioning and practical skills. Men and women, all levels.
This course is repeatable for 11 credits.

PAC 224. TELEMARK SKIING. (1 Credit)
Winter sport that is a cross between cross country and downhill skiing. Requires telemark equipment where the heel is unattached. Class accommodates all levels and practices on the downhill slopes. Additional fee covers bus transportation, lessons, and lift ticket. Rental of equipment is not included.
This course is repeatable for 11 credits.

PAC 225. DOWNHILL SKIING. (1 Credit)
Travel to area facilities, 1 1/2 hour lesson followed by open practice, students grouped according to skill level: beginner, intermediate, advanced, racer. Special fee covers bus transportation, lessons, and lifts. Additional fee for rentals.
This course is repeatable for 11 credits.

PAC 227. SNOWBOARDING. (1 Credit)
Travel to area facilities, 1 1/2 hour lesson followed by open practice, students grouped according to skill level: beginner, intermediate, advanced. Special fee covers bus transportation, lessons, and lifts. Additional fee for rentals.
This course is repeatable for 11 credits.

PAC 229. SOCCER I. (1 Credit)
Basic skills of controlling the ball; conditioning; lead-up games; team play.
This course is repeatable for 11 credits.

PAC 230. SOCCER II. (1 Credit)
Review of basic skills of offense and defense in controlled game play; concepts of team position and play, pressure and attack.
This course is repeatable for 11 credits.

PAC 231. SOCCER III. (1 Credit)
High level soccer skills; team play and transition concepts; set plays and alignments for both offense and defense.
This course is repeatable for 11 credits.

PAC 233. SOCCER: INDOOR. (1 Credit)
Skill instruction and development; strategies and rules for indoor play; game play in indoor gymnasium.
This course is repeatable for 11 credits.

PAC 236. SOFTBALL, WHIFFLEBALL. (1 Credit)
Skills, rules, strategies, practice, and game play of the popular outdoor slow pitch game. Modified softball with whiffleball when play is indoors.
Equivalent to: PAC 262
This course is repeatable for 11 credits.

PAC 242. SCUBA: OPEN WATER. (2 Credits)
Lecture includes physiology, water environment, equipment, and techniques for fundamental SCUBA diving. Laboratory includes practice in techniques, skills, and equipment usage; sessions held in pool and open water. Successful completion leads to PADI certification. Additional fee covers most equipment, texts, certification, and open water dive trip.
This course is repeatable for 11 credits.

PAC 243. SCUBA: ADVANCED OPEN WATER. (1 Credit)
Classroom lecture and laboratory in hypothermics, natural navigation, dive physiology, compass navigation, night and limited visibility procedures, boat diving, search and salvage techniques, deep diving procedures, health for diving, and an introduction to dive rescue. Successful completion of this course can lead to PADI certification. Additional fee.
This course is repeatable for 11 credits.

PAC 244. SCUBA: RESCUE DIVER. (1 Credit)
Techniques, skills, knowledge, and practice in self-rescue and rescue of others in underwater emergencies; may lead to PADI certification; lecture and pool laboratory; open water dive required. Additional fee.
This course is repeatable for 11 credits.

PAC 245. SCUBA SPECIAL TOPICS. (1 Credit)
Specialized courses requiring previous certification in SCUBA. Check the current schedule of classes for more information and prerequisites. Possible classes: altitude diver, night diver, search and recovery, deep diver, underwater navigation, equipment specialist. Additional fee.
This course is repeatable for 11 credits.

PAC 246. DIVE MASTER TRAINING. (2 Credits)
Enter level PADI certification course for preparation to instruct SCUBA; lecture, lab, open water experience; must take two consecutive terms. Additional fee: $160 per term.
This course is repeatable for 11 credits.

PAC 247. SURFING. (1 Credit)
Knowledge and fundamental skills of this aquatic sport including history, terminology, safety precautions, the ocean environment, and equipment. Additional fee.
Equivalent to: PAC 286
This course is repeatable for 11 credits.

PAC 248. SWIM: NON-SWIMMER. (1 Credit)
Skills for self-rescue; fundamental skills in swimming and safety. Designed for people with a fear of water. Recommended S/U grading.
This course is repeatable for 11 credits.

PAC 249. LIFEGUARD TRAINING. (1 Credit)
Class accommodates all levels and practices on the downhill slopes. Additional fee.
Successful completion of this course can lead to PADI certification. Additional fee.
This course is repeatable for 11 credits.

PAC 250. SWIM I. (1 Credit)
Swimming concepts, survival and breathing techniques, front crawl and elementary backstroke as minimum instruction.
This course is repeatable for 11 credits.

PAC 252. SWIM II. (1 Credit)
Fitness swimming, swimming strokes and skills.
This course is repeatable for 11 credits.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PAC 253</td>
<td>SWIM TRAINING WORKOUT</td>
<td>1 Credit</td>
<td>Competitive skills and strokes; emphasis on training.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 254</td>
<td>COMPETITIVE SWIMMING</td>
<td>1 Credit</td>
<td>Prepares students for competitive swimming and emphasizes lifetime aquatic fitness; interval swim workouts designed for speed and endurance; instruction on legal techniques of strokes and turns; culminates in intra-class swim meet; 2,000-3,000 yards/day.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 256</td>
<td>TAIJI, TAI CHI I. (1 Credit)</td>
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<td>Introduction to ancient Chinese 'internal martial art' based upon concepts of Yin and Yang; detailed slow and relaxed form movements provide benefits to body, mind, and spirit.</td>
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<tr>
<td>PAC 257</td>
<td>TAIJI, TAI CHI II. (1 Credit)</td>
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<td>Continuation of study of the Yang-style Taiji form; more in-depth exploration of underlying principles and push-hands exercises.</td>
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<tr>
<td>PAC 260</td>
<td>TENNIS I. (1 Credit)</td>
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<td>Introduction to fundamental strokes, singles and doubles play, scoring, and basic concepts in tennis.</td>
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<tr>
<td>PAC 261</td>
<td>TENNIS II. (1 Credit)</td>
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<td>Review and refinement of fundamental strokes; volley, lob, return of serve; introduction to singles and doubles strategy.</td>
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<tr>
<td>PAC 262</td>
<td>TENNIS III. (1 Credit)</td>
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<td>Focus on ground stroke, serve consistency, approach shots and overheads; tactics for net and baseline play.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 264</td>
<td>TEAM HANDBALL/(MEN/WOMEN). (1 Credit)</td>
<td></td>
<td>Fast-paced indoor court game that combines skills and strategies similar to water polo, basketball, soccer and hockey; rules, regulations, strategies, and skills introduced and practiced; requires teamwork, cooperation, and court strategy.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 265</td>
<td>TUMBLING I. (1 Credit)</td>
<td></td>
<td>Technical instruction, progressions, and practice in basic, intermediate, and advanced tumbling skills; emphasis on safety and fitness concepts; floor and mini-trampoline skills; no apparatus instruction.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 266</td>
<td>TUMBLING II. (1 Credit)</td>
<td></td>
<td>Technical instruction, progressions, safety, and practice building upon skills taught in PAC 265, Tumbling I.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 268</td>
<td>TRIATHLON TRAINING. (2 Credits)</td>
<td></td>
<td>Training in swimming, running, and bicycling to prepare for triathlon participation. Strategies, transitioning technique, and weight training information; training plan formation; event planning; culminates in class or community event.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 271</td>
<td>ULTIMATE FRISBEE. (1 Credit)</td>
<td></td>
<td>Fundamentals for the beginning and intermediate player; individual skill development, rules, game play, and strategy.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 273</td>
<td>VOLLEYBALL I. (1 Credit)</td>
<td></td>
<td>Fundamental volleyball skills, drills, rules, strategies, and practice. Game play appropriate for skill level.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 274</td>
<td>VOLLEYBALL II. (1 Credit)</td>
<td></td>
<td>Fundamental skills and knowledge refined; intermediate skills developed, competitive play.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 275</td>
<td>VOLLEYBALL III. (1 Credit)</td>
<td></td>
<td>Skill refinement and development; intense, highly competitive drills and game situations, doubles through sixes play.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 278</td>
<td>FITNESS WALKING. (1 Credit)</td>
<td></td>
<td>Establishment of personal fitness programs through walking with emphasis on technique and aerobic components.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 282</td>
<td>WATER POLO. (1 Credit)</td>
<td></td>
<td>Team game, played in deep water; instruction in skills, drills, strategies, techniques; game play; knowledge of rules and terminology.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 286</td>
<td>WEIGHT TRAINING: CIRCUITS. (1 Credit)</td>
<td></td>
<td>Fast-paced fitness class using stations of resistance training exercises. Designed to improve cardiovascular fitness and muscular endurance more than strength.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 287</td>
<td>WEIGHT TRAINING I. (1 Credit)</td>
<td></td>
<td>Exercise techniques in both free and fixed resistance training equipment; safety procedures, terminology, and principles of exercise.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 288</td>
<td>WEIGHT TRAINING II. (1 Credit)</td>
<td></td>
<td>Intermediate level of weight training in free and fixed weights.</td>
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<td>Prerequisites: PAC 287 with C+ or better</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 292</td>
<td>WRESTLING. (1 Credit)</td>
<td></td>
<td>Collegiate wrestling fall and winter terms; freestyle and Greco wrestling spring term. All levels.</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 293</td>
<td>INTERDISCIPLINARY YOGA. (1 Credit)</td>
<td></td>
<td>Basic yoga poses (asanas) using specific techniques and sequences to promote flexibility, strength, relaxation, and a sense of well-being will be used. Integrative concepts between yoga and our daily life will be examined as well as yoga in relationship to other forms of physical movement.</td>
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<td>Equivalent to: PAC 293H</td>
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<td>This course is repeatable for 11 credits.</td>
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<tr>
<td>PAC 293H</td>
<td>INTERDISCIPLINARY YOGA. (1 Credit)</td>
<td></td>
<td>Basic yoga poses (asanas) using specific techniques and sequences to promote flexibility, strength, relaxation, and a sense of well-being will be used. Integrative concepts between yoga and our daily life will be examined as well as yoga in relationship to other forms of physical movement.</td>
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<td>Attributes: HNRS – Honors Course Designator</td>
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<td>Equivalent to: PAC 293</td>
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<td>This course is repeatable for 11 credits.</td>
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</table>
PAC 294. YOGA I. (1 Credit)
Principles and practice of basic yoga postures, techniques of posture alignment, yogi breathing styles and their impact on the body and mind. Students will be exposed to a variety of forms of yoga, as well as basic yoga philosophy.
This course is repeatable for 11 credits.

PAC 295. YOGA II. (1 Credit)
Building off Yoga I, this is an intermediate level course meant to develop a deeper understanding of yoga practice.
Equivalent to: PAC 256
This course is repeatable for 11 credits.

PAC 296. VINYASA YOGA. (1 Credit)
Dynamic flow that connects movement and breath encouraging meditation in motion. May include sustained yoga postures.
This course is repeatable for 11 credits.

PAC 297. YOGATHON. (1 Credit)
Expands on knowledge and skills learned in Yoga I or Fitness Yoga through three to five class sessions, each 3-6 hours; longer sessions provide students with an intensive mental and physical experience centering on the concepts of yoga; includes introductory relaxation and meditation skills.
This course is repeatable for 11 credits.

PAC 298. RESTORATIVE YOGA. (1 Credit)
An emphasis on floor postures, supported postures, and longer holds that cultivate a relationship with ease. Techniques will be used to help students facilitate greater personal awareness. Students will use self-reflection practices for personal well-being.
This course is repeatable for 11 credits.

PAC 299. SPECIAL TOPICS. (1-3 Credits)
Advanced information, skills, practice, and application; experimental and new classes. May have additional fee.
This course is repeatable for 11 credits.

PAC 300. ALI: HIKING LOCAL TRAILS. (1 Credit)
Covers the fundamentals of hiking as a recreational activity and an outdoor travel skill. Content will cover local trails, place history, hiking techniques, clothing and equipment selection, elemental first aid and safety concerns, leave-no-trace principles, and map basics. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 301. ALI: CHALLENGE COURSE EXPERIENCE. (1 Credit)
Emphasis on gaining practical experience and understanding of various components that occur in challenge course activities/programs; group dynamic mental and physical challenges; cooperative games and initiatives that promote communication, problem solving skills and leadership; Low and High challenge course activities that promote self-confidence and agility. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 302. ALI: CHALLENGE COURSE PRACTICES AND FACILITATION. (1 Credit)
Covers the set up and facilitation of various challenge course low and high course elements as they pertain to ALI’s Challenge Course programming. Students will learn facilitation skills, risk management concepts, operational procedures, and technical rescue skills. A passing grade in this course will result in a certificate of completion from the OSU ALI Challenge Course. PAC courses may not be used to fulfill upper-division requirements.
Prerequisites: PAC 301 with C- or better
This course is repeatable for 11 credits.

PAC 303. ALI: CAMP CRAFT. (1 Credit)
Provides basic front-country camping skills such as packing, trip planning, how to dress for different climates/weather, storm-proofing, knife and axe techniques and safety, stove and kitchen operations, and fire building. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 304. ALI: BACKPACKING. (1 Credit)
Hiking and camping while carrying all gear; tent set-up, camp site selection, operation of single-burner stoves, loading a backpack, water infiltration, navigation, proper hiking technique, energy conservation; leave-no-trace principles in every aspect of the trip and class; includes classroom instruction and required overnight trip. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 305. ALI: RAFTING. (1 Credit)
An introduction to white water rafting. Students will learn the fundamentals of safe rafting, trip planning and become familiar with the gear associated with rafting. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 306. ALI: CANOEING. (1 Credit)
Designed as an introduction to canoeing. Students learn the fundamentals of safe canoeing, trip planning and become familiar with the gear associated with rafting. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 307. ALI: STAND UP PADDLEBOARD. (1 Credit)
Covers the curriculum for level 1 and 2 American Canoe Association standup paddle board skills courses. Skills include equipment, environmental factors, techniques, preparation and planning, emergency management, and environmental ethics. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 308. ALI: CANYONEERING. (1 Credit)
Students will learn the fundamentals of canyoneering, including efficient hiking techniques, safe anchoring, belaying and rappelling techniques, and environmental mitigation skills. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 311. ALI: BOULDERING. (1 Credit)
Introduction to the sport of bouldering, a subset of rock climbing using an indoor climbing facility; emphasis on safety, spotting, climbing movement, training techniques and improvement; provides activities that promote muscular strength and endurance, flexibility, and cardiovascular endurance. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.
PAC 315. ALI: ROCK CLIMBING I. (1 Credit)
Physical conditioning for, and instruction in, the skills and techniques of rock climbing; environmental impact issues; held at on-campus indoor climbing center. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 316. ALI: ROCK CLIMBING II. (1 Credit)
Focuses on developing technical climbing skills related to lead climbing and anchor construction. It will include a one day outdoor experience.
Prerequisites: PAC 315 with C- or better
This course is repeatable for 11 credits.

PAC 317. ALI: ROCK CLIMBING III. (1 Credit)
Focuses on developing technical climbing skills in an outdoor setting. The course will include a weekend long outdoor experience and cover skills ranging from building anchors using natural protection, to advanced outdoor movement skills.
Prerequisites: PAC 315 with C- or better and PAC 316 [C-]
This course is repeatable for 11 credits.

PAC 319. ALI: TECHNICAL RAPPELLING. (1 Credit)
Students will learn, practice and hone their skills in the art of technical rappelling. Introduces many different styles, techniques and equipment used for rappelling in a variety of situations. Throughout the course, students will be provided with simple to advanced challenges to overcome. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 320. ALI: MOUNTAINEERING I. (1 Credit)
Snow climbing techniques, anchoring, belaying and rappelling techniques, snow camping/living skills, and wilderness ethics; classroom instruction and required overnight alpine trip. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 321. ALI: MOUNTAINEERING II. (1 Credit)
Building on skills learned in Mountaineering I; rope team/glacier travel experience, fundamentals of crevasse rescue, advanced snow climbing techniques, safe anchoring, belaying and rappelling techniques, snow camping/living skills, and wilderness ethics. PAC courses may not be used to fulfill upper-division requirements.
Prerequisites: PAC 320 with C- or better
This course is repeatable for 11 credits.

PAC 322. ALI: ICE CLIMBING. (1 Credit)
Students will learn the fundamentals of ice climbing, including efficient ice climbing techniques, safe anchoring, belaying and rappelling techniques and wilderness ethics. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 324. ALI: WHITE WATER RESCUE. (1 Credit)
Provides an introduction to white water rescue; students learn the fundamentals of white water rescue, scene management, and the necessary gear to perform rescues. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 325. ALI: WILDERNESS FIRST AID. (1 Credit)
Fundamentals of emergency care in a non-urban environment including anatomy, physiology, injury assessment, short-term care, small-group rescues; backcountry emphasis with long-term care and evacuation complications. PAC courses may not be used to fulfill upper-division requirements.
Equivalent to: PAC 325H
This course is repeatable for 11 credits.

PAC 325H. ALI: WILDERNESS FIRST AID. (1 Credit)
Fundamentals of emergency care in a non-urban environment including anatomy, physiology, injury assessment, short-term care, small-group rescues; backcountry emphasis with long-term care and evacuation complications. PAC courses may not be used to fulfill upper-division requirements.
Attributes: HNRS – Honors Course Designator
Equivalent to: PAC 325
This course is repeatable for 11 credits.

PAC 326. ALI: WILDERNESS LIVING TECHNIQUES. (1 Credit)
Basic wilderness living techniques, knowledge and skills needed for a student to be ethical and efficient, and have the ability to survive in the outdoors. Special emphasis is placed on building shelters, water purification, navigation, awareness, fire, self-sufficiency and caring for groups in the wilderness. PAC courses may not be used to fulfill upper-division requirements.
Prerequisites: PAC 303 with D- or better
This course is repeatable for 11 credits.

PAC 327. ALI: ROCK GUIDE SCHOOL. (1 Credit)
Serves as an opportunity to learn the skills for being a rock guide for the ALI. With five days of training and practice in the field at two climbing sites in Oregon, it serves to help students understand the unique challenges of instructing climbing in the outdoor environment. This course may end with Sport Climbing Instructor certification through the Professional Climbing Instructors of America. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 328. ALI: RAFT GUIDE SCHOOL. (1 Credit)
Provides students the skills and guided practice time needed to become competent paddle raft guides. It is a nine-day course that focuses on the development of water reading, raft maneuvering, risk management, and whitewater rescue skills needed by raft guides. Successful completion of the course will result in a certificate of completion from the American Canoe Association (ACA). PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 329. ALI: WILDERNESS FIRST RESPONDER. (2 Credits)
Fundamentals of emergency care in a non-urban environment, including physiology, injury assessment, short-term care, anatomy, and small-group rescues. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.

PAC 330. ALI: SNOW TRAVEL AND CAMPING. (1 Credit)
An introduction to traveling in the backcountry in adverse weather conditions that often accompany winter. Topics covered include cross country touring, snow shoeing, winter camping techniques, and winter safety considerations including introducing avalanche safety. PAC courses may not be used to fulfill upper-division requirements.
This course is repeatable for 11 credits.
PAC 331. THE ART OF FLY FISHING. (1 Credit)
Students will be introduced to fly fishing skills such as casting, knot tying, safety considerations, fly selection, and ways to approach water. There will be a general overview of common places and species to fish in Oregon and other locations. This course combines approximately 30 hours of instruction, online activities, and assignments for 1 credit. PAC courses may not be used to fulfill upper-division requirements.

Corequisites: ENG 225, FW 112
This course is repeatable for 11 credits.

Public Health

H 100. INTRODUCTION TO PUBLIC HEALTH. (4 Credits)
A basic overview of public health. Uses a mix of lectures, guest speakers, classroom activities and homework to help students understand the role of public health in eliminating health disparities, understanding epidemics, and setting policy.
Equivalent to: H 100H

H 100H. INTRODUCTION TO PUBLIC HEALTH. (4 Credits)
A basic overview of public health. Uses a mix of lectures, guest speakers, classroom activities and homework to help students understand the role of public health in eliminating health disparities, understanding epidemics, and setting policy.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 100

H 199. SPECIAL STUDIES. (1-16 Credits)
PREREQ: Departmental approval required.
This course is repeatable for 16 credits.

H 206. PROJECTS. (1-16 Credits)
This course is repeatable for 16 credits.

H 210. *INTRODUCTION TO THE HEALTH CARE SYSTEM. (3 Credits)
Provides tools to understand and critically assess the health care delivery system, its components, and the challenges created by its structure. The health care system will be considered from the perspective of several main players [e.g., patients, hospitals, doctors, health plans]. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst

H 220. INTRODUCTION TO HEALTH DATA ANALYSIS. (3 Credits)
Introduction to the application of biostatistics and probability to the health sciences. Topics include quantitative analysis and inference, statistical methods in the biosciences, and quantitative study to evaluate and control health problems.

H 225. *SOCIAL AND INDIVIDUAL HEALTH DETERMINANTS. (4 Credits)
Overview of the macro (social/system/environmental) and micro (individual) contributors to premature disease, disability and population health. Selected behavioral theories supporting health risks and strategies for the prevention of premature disease/disability and the promotion of health. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst

H 250. INTRODUCTION TO HEALTH CARE MANAGEMENT. (3 Credits)
Participants will learn key principles, practices and personalities of health care management. The content is broadly applicable to health care enterprises of every kind: public health organizations, physician practices and clinics, hospitals and health systems, agencies and service organizations, for-profit firms, not-for-profit enterprises, etc.

Prerequisites: H 210 (may be taken concurrently) with C- or better

H 309. PRACTICUM IN HEALTH CARE SERVICES. (3-6 Credits)
Supervised work experience in a health care service setting or health-related agency or program. Weekly progress reports and post-experience summary report and evaluation will be expected. Preplanned with instructor approval. Open to health care administration majors. Graded P/N.
This course is repeatable for 12 credits.

H 310. HEALTH FIELD EXPERIENCES. (3-6 Credits)
Introductory field experience in a health or health-related worksite. Graded P/N.
Prerequisites: H 210 with C- or better
This course is repeatable for 12 credits.

H 312. *HIV/AIDS AND STIS IN MODERN SOCIETY. (3 Credits)
Fundamental principles relating to etiology, nature, prevention, and control of AIDS and other sexually transmitted diseases in contemporary society; emphasis on social, psychological, legal, economic, and ethical issues surrounding these diseases. (Bacc Core Course)
Attributes: CSGI – Core, Synth, Global Issues

H 319. INTRODUCTION TO HEALTH POLICY. (3 Credits)
Describe the policy development process, including problem conceptualization, agenda setting, role of interest groups and public opinion, analysis of alternatives and selection of policy alternative.
Prerequisites: H 210 with C- or better and PS 201 [C-]

H 320. INTRODUCTION TO HUMAN DISEASE. (3 Credits)
Fundamental principles relating to etiology, nature, prevention, and control of communicable and noncommunicable diseases in human populations. Special emphasis on disease prevention and health promotion in the high risk diseases of modern, industrialized society.

H 333. *GLOBAL PUBLIC HEALTH. (3 Credits)
Introduction to the field of global health, its history, methods, and key principle; understanding global health inequities through case studies; overview of major global health prevention programs. (Bacc Core Course)
Attributes: CPSI – Core, Pers, Soc Proc & Inst

H 344. FOUNDATIONS OF ENVIRONMENTAL HEALTH. (3 Credits)
Introductory course examining environmentally-linked disease, and health effects associated with toxic substances, food quality, pesticides, air, water, and noise pollution, and solid/hazardous wastes.

H 349. PEER HELPER SKILLS DEVELOPMENT. (3 Credits)
Prepares the student for an active role as a peer helper in alcohol and drug abuse prevention and health education. Course work will include: drug, alcohol, addiction and other related health issues, basic listening and communication skills, conflict resolution, crisis recognition and referral. A major component will be affective learning situations designed to promote self-awareness and personal growth.

H 364. DRUGS, SOCIETY AND HUMAN BEHAVIOR. (3 Credits)
Drug use and abuse; theories of addiction; basic principles of drug action regarding the use of sedative and stimulative compounds; alcohol; opiates; hallucinogens; designer drugs; cocaine; and over-the-counter products. Particular emphasis on the role of the individual's value orientation, decision-making, and self-responsibility in treatment and educational approaches to prevention.
Prerequisites: PSY 201 with C- or better or PSY 202 with C- or better
Equivalent to: H 364H
H 364H. DRUGS, SOCIETY AND HUMAN BEHAVIOR. (3 Credits)
Drug use and abuse; theories of addiction; basic principles of drug action
regarding the use of sedative and stimulative compounds; alcohol;
opiates; hallucinogens; designer drugs; cocaine; and over-the-counter
products. Particular emphasis on the role of the individual's value
orientation.
Attributes: HNRS – Honors Course Designator
Prerequisites: PSY 201 with C- or better or PSY 202 with C- or better
Equivalent to: H 364

H 385. SAFETY AND HEALTH STANDARDS AND LAWS. (3 Credits)
Emphasis on the Occupational Safety and Health Act; study includes
the scope and duties under the act, enforcement, and adjudication
procedures and OSHA litigation; components of Oregon-OSHA.

H 399. SPECIAL TOPICS. (1-16 Credits)
Equivalent to: H 399H
This course is repeatable for 16 credits.

H 399H. SPECIAL TOPICS. (1-16 Credits)
Attributes: HNRS – Honors Course Designator
Equivalent to: H 399
This course is repeatable for 16 credits.

H 401. RESEARCH AND SCHOLARSHIP. (1-16 Credits)
This course is repeatable for 16 credits.

H 402. INDEPENDENT STUDY. (1-16 Credits)
This course is repeatable for 16 credits.

H 403. THESIS. (1-16 Credits)
This course is repeatable for 16 credits.

H 405. READING AND CONFERENCE. (1-16 Credits)
This course is repeatable for 16 credits.

H 406. PROJECTS. (1-16 Credits)
This course is repeatable for 16 credits.

H 407. SEMINAR. (2 Credits)
Seminar to prepare students for their internship in public health. Focus
is on professionalism, leadership skills, identifying strengths, and
transitioning from college to graduate school or the working world.
Equivalent to: H 407H

H 407H. SEMINAR. (2 Credits)
Seminar to prepare students for their internship in public health. Focus
is on professionalism, leadership skills, identifying strengths, and
transitioning from college to graduate school or the working world.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 407

H 408. WORKSHOP. (1-16 Credits)
PREREQ: Departmental approval required.
This course is repeatable for 16 credits.

H 409. PRACTICUM. (1-6 Credits)
Supervised work experience in a public health or health care
administration setting. Open to majors in public health. Graded P/N.
This course is repeatable for 16 credits.

H 410. INTERNSHIP. (1-12 Credits)
Directed field experience with participation in a community, worksite,
or health agency program. Experience is individually arranged to meet
student needs. Graded P/N.
Prerequisites: H 407 with C- or better
This course is repeatable for 24 credits.

H 418. PUBLIC HEALTH ETHICS AND ISSUES. (3 Credits)
Current ethical issues in public health, including gender and ethnicity in
employment, pharmaceutical controls, product liability, advertising, and
export of high technology.

H 421. MENTAL HEALTH. (3 Credits)
Examination of social, governmental, legal and individual mental health
issues. Brief overview of some major mental disorders.
Prerequisites: H 225 with C- or better and H 320 [C-]

H 422. HEALTH, AGING AND CONTROL OF CHRONIC DISEASES. (4
Credits)
Epidemiology of the major chronic diseases, risk factors, potential
methods of prevention/intervention, ethical issues, and efficacy
of current methods of prevention and control. Emphasis on adult
populations and public health services, policies, and programs at the
local, state, and federal levels designed to promote healthy aging.

H 425. FOUNDATIONS OF EPIDEMIOLOGY. (3 Credits)
Measures of disease frequency; measures of effect; association and
causation; sources of inaccuracy; experimental and observational study
designs. Lec/rec.
Prerequisites: H 220 with C- or better or ST 201 with C- or better or ST 314
with C- or better or ST 351 with C- or better

H 431. HEALTH CARE MARKETING. (3 Credits)
Principles, elements and methods of marketing health care services. Role
of the consumer, governing body, administration and medical staff as well
as impact of professional ethics.

H 432. ECONOMIC ISSUES IN HEALTH AND MEDICAL CARE. (3 Credits)
Application of economic principles to the health care field: the demand
for medical care and insurance, health care suppliers, health care
markets.
Prerequisites: (ECON 201 with C- or better or ECON 201H with C- or
better) and H 210 [C-]

H 434. *HEALTH CARE LAW AND REGULATION. (3 Credits)
Legal aspects of health care delivery; tort law and its applications;
professional liability and liability insurance; laws relative to health care
institutions, cost controls, antitrust and access. (Writing Intensive
Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisites: H 210 with C or better and H 250 [C-] and WR 222 [C-]

H 436. ADVANCED TOPICS IN HEALTH CARE MANAGEMENT. (3 Credits)
Covers how health services are governed and organized; how health care
organizations assess and adapt to change; constraints/opportunities
in shaping organizational performance; leadership; strategic decision-
Making and the use of evidence-based management in health care.
Prerequisites: H 210 with C- or better and H 250 [C-]

H 445. *OCCUPATIONAL HEALTH. (3 Credits)
Current and historical topics in the area of occupational health, with
particular emphasis on the types of materials that produce human health
effects; clinical and epidemiologic data used to assess the public health
importance of occupational pollutants and to evaluate control strategies.
(Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society

H 448. PUBLIC HEALTH TOXICOLOGY. (3 Credits)
Introduction to the concepts and principles of toxicology as they apply to
environmental and occupational health.
Prerequisites: H 344 with C- or better
H 449. MASS MEDIA AND HEALTH. (3 Credits)
Designed to examine the effects of mass media on population health, from the negative impact of advertising of cigarettes, alcohol and junk food, to the (hopefully) positive impact of public-health campaigns.
Prerequisites: H 225 with C- or better and H 320 [C-]

H 457. FINANCIAL MANAGEMENT OF HEALTH CARE ORGANIZATIONS. (3 Credits)
Utilization of standard financial tools needed to manage the capital resources of health care organizations. Includes funding capital projects, product costing, budgeting methods, capital formation and investment strategies.
Prerequisites: BA 215 with C- or better and H 210 [C-] and H 250 [C-]

H 458. REIMBURSEMENT MECHANISMS. (3 Credits)
Introduces and analyzes the different types of healthcare reimbursement methodologies used in the U.S. health care system.
Prerequisites: H 210 with C- or better

H 461. SEXUALITY: A HEALTH SCIENCE PERSPECTIVE. (3 Credits)
Exploration of the meaning of sexuality from a variety of contemporary health science perspectives; aspects of sex and sexuality fundamental to total health; issues central to the health educator role examined.

H 465. *PUBLIC HEALTH AND WOMEN: SOCIAL AND POLICY ISSUES. (3 Credits)
Public health approach to the identification of women's health needs in the United States and in other countries as it relates to the intersection of race, ethnicity, social class, sexual orientation, age, and ability. (Bacc Core Course)
Attributes: CPDP – Core, Perspective, Difference/Power/Discrimination

H 467. LONG-TERM CARE ALTERNATIVES. (3 Credits)
Overview of the long-term care alternatives. Comparisons of nursing homes with community based facilities; adult day care centers, respite to hospice facilities, social HMOs and other services; cost, quality of life and practicality are addressed.

H 468. FINANCING AND ADMINISTRATION OF LONG-TERM CARE. (3 Credits)
Examines the financing and administration of long term care. Emphasis is on a system-wide overview and specific application to nursing facility management.

H 474. PUBLIC HEALTH AND VIOLENCE IN SOCIETY. (3 Credits)
Examination of violence as a major public health issue. Historical, social, environmental, economic, behavioral and psychological aspects of assaultive violence, spousal abuse, rape and sexual assault, child abuse, child sexual abuse, suicide, the effects of the media on violence, drug abuse and violence, and related public health problems in contemporary American society. Emphasis on health and the efficacy of current efforts aimed at ameliorating these problems and potential for alternative public health models for prevention and intervention.

H 476. *PLANNING AND EVALUATING HEALTH PROMOTION PROGRAMS. (4 Credits)
A systematic approach to planning, implementing and evaluating health promotion programs in a variety of health related settings. Students will be writing a series of drafts to effectively develop a health promotion program plan. (Writing Intensive Course)
Attributes: CWIC – Core, Skills, WIC
Prerequisites: H 225 with C- or better and H 320 [C-]

H 477. DIETARY INTERVENTIONS FOR PUBLIC HEALTH. (3 Credits)
A public health perspective on the practice of population-based dietary intervention. Examination of relevant theories, research, and practice that pertain to health promoters/educators.
Prerequisites: NUTR 225 with C- or better

H 480. UNDERGRADUATE EOH SEMINAR. (1 Credit)
Explores current topics in environmental health and safety. EOH faculty will discuss their current research interests; EOH graduate student speakers will share their environmental health and safety internship experiences. Documentaries will be viewed to introduce topics of discussion. Features will be discussions relating directly to ongoing, current environmental/occupational health crises, both in the United States and around the world. Graded P/N. This course is repeatable for 2 credits.

H 489. EMERGENCY AND DISASTER MANAGEMENT. (3 Credits)
Study of preparedness, response, recovery and business resumption strategies, activities and applications needed to effectively deal with emergency and disaster incidents.

H 491. SELECTED TOPICS. (1-3 Credits)
Recent changes and advances in public health and health care administration and their application to special fields of study. Topics vary from term to term and year to year.
Equivalent to: H 491H
This course is repeatable for 6 credits.

H 491H. SPECIAL TOPICS. (1-3 Credits)
Recent changes and advances in public health and health care administration and their application to special fields of study. Topics vary from term to term and year to year.
Attributes: HNRS – Honors Course Designator
Equivalent to: H 491
This course is repeatable for 6 credits.

H 494. APPLIED ERGONOMICS. (3 Credits)
Principles of occupational ergonomics for managing optimal worker performance and well-being.

H 495. DESIGN FOR ENVIRONMENT, SAFETY, AND HEALTH. (3 Credits)
Systematic consideration of environmental, safety, and health concerns at the earliest possible stage in the lifecycle design engineering of products, technologies, and manufacturing processes.

H 501. RESEARCH AND SCHOLARSHIP. (1-16 Credits)
This course is repeatable for 16 credits.

H 503. THESIS. (1-16 Credits)
This course is repeatable for 999 credits.

H 505. READING AND CONFERENCE. (1-16 Credits)
This course is repeatable for 16 credits.

H 506. PROJECTS. (1-16 Credits)
This course is repeatable for 16 credits.

H 507. SEMINAR. (1-16 Credits)
Section 1. Internship (1). Graded P/N. This course is repeatable for 16 credits.

H 508. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

H 509. PRACTICUM. (1-16 Credits)
Supervised work experience in a public health or health care administration setting. Open to majors in public health. Graded P/N. This course is repeatable for 16 credits.
H 510. INTERNSHIP. (1-16 Credits)
Directed field experience with participation in a community, worksite, or health agency program. Experience is individually arranged to meet student needs. Graded P/N. This course is repeatable for 16 credits.

H 511. COMMUNITY, CULTURE, AND GLOBAL HEALTH. (3 Credits)
Overview of health issues across cultures, ethnic groups, and regional/national boundaries from a critical and interdisciplinary perspective. Special emphasis on understanding social and behavioral factors that influence health in underserved communities/groups, especially ethnic/racial minorities, women, children, and migrants.

H 512. INTRODUCTION TO ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES. (3 Credits)
Introduction to environmental and occupational health. Hazards affecting human health are examined in the context of current social, political and regulatory pressures.

H 513. INTEGRATED APPROACH TO PUBLIC HEALTH. (12 Credits)
An integrated approach to introduce students to the core knowledge and methods used in public health, including evidence-based approaches to public health, public health and health care systems, planning and management to promote health, and policy in public health.

H 514. ENVIRONMENT, SAFETY AND HEALTH SEMINAR. (1 Credit)
One-credit graduate seminar on current topics of interest and importance to the environmental health and occupational safety field. Critical reading of research publications, discussion of controversial issues facing ESH professionals, and/or presentation of current ESH research. This course is repeatable for 3 credits.

H 515. RESEARCH METHODS IN SOCIAL AND BEHAVIORAL HEALTH SCIENCES. (3 Credits)
Provides an introduction to quantitative research methods and design. Topics include definition of research problems and questions, hypothesis generation, research design, sampling, variable definition and measurement, data collection, and ethical considerations. Also provides a brief introduction to qualitative and mixed methods.

H 516. RESEARCH METHODS IN GLOBAL HEALTH. (3 Credits)
Overview of research methods used to understand health, illness, health care, and health-seeking behavior in international settings. Special emphasis on the use of qualitative and mixed methods in international health research.

H 518. PUBLIC HEALTH ETHICS AND ISSUES. (3 Credits)
Current ethical issues in public health, including gender and ethnicity in employment, pharmaceutical controls, product liability, advertising, and export of high technology.

H 519. DISPLACEMENT, MIGRATION, AND GLOBAL HEALTH. (3 Credits)
Critical examination of health of displaced/migrant populations with an emphasis on health disparities and social determinants. Understanding intersections of humanitarianism, migration, vulnerability, and displacement from a global health perspective.

H 520. HEALTH DISPARITIES. (3 Credits)
Health disparities based on race/ethnicity, culture, social class, and rural/urban residence, among others; strategies to reduce disparities, promote health, and prevent disease in diverse populations.

H 521. MENTAL HEALTH. (3 Credits)
Focus upon mental health policy development, in relation to federal and state government services and regulations, implementation of services.

H 522. HEALTH, AGING AND CONTROL OF CHRONIC DISEASES. (4 Credits)
Epidemiology of the major chronic diseases, risk factors, potential methods of prevention/intervention, ethical issues, and efficacy of current methods of prevention and control. Emphasis on adult populations and public health services, policies, and programs at the local, state, and federal levels designed to promote healthy aging.

H 523. FOUNDATIONS OF PUBLIC HEALTH. (4 Credits)
Fundamental principles, concepts and tools used in public health to promote the health of populations. Using a combination of case study method, lecture and discussion, students will develop a broad understanding of public health and recognition of how discipline-specializations address the social, behavioral and environmental determinants of public health.

H 524. INTRODUCTION TO BIOSTATISTICS. (4 Credits)
Quantitative analysis and interpretation of health data including probability distributions, estimation of effects, and hypothesis-tests such as Chi-square, one-way ANOVA, and simple linear regression.

H 525. EPIDEMIOLOGICAL METHODS I. (3 Credits)
Introduction to the concepts and methods of epidemiology. Topics include measures of population health, screening, study design, measures of association, and interpretation of epidemiological data. Prerequisites: H 513 with B- or better or H 535 with B- or better

H 526. EPIDEMIOLOGIC METHODS II. (3 Credits)
Concepts and methods of epidemiological analysis; stratification; confounding, and its control; and planning and conducting epidemiologic research; role of multivariate analysis in epidemiologic research. Prerequisites: H 524 with B- or better and H 525 [B-]

H 527. CRITICAL ASSESSMENT OF INTERNATIONAL HEALTH PROGRAMS. (3 Credits)
Introduces the critical evaluation framework of assessing international health development programs, based on self-determination and community ownership principles. The framework of assessment method includes three levels: upstream evaluation, midstream evaluation, and downstream evaluation.

H 528. GLOBAL HEALTH ISSUES. (3 Credits)
Examines major issues in health developments of global significance, their causes and impacts on international health, and methods and strategies to address them.

H 529. INTERNATIONAL HEALTH. (3 Credits)
Overview of the epidemiological, economic, political, sociological, and cultural factors that impact on international health. Special emphasis on the methods of prevention/intervention utilized in coping with health problems on an international level.

H 530. HEALTH POLICY ANALYSIS AND POLITICS. (3 Credits)
Examination of current health policy issues affecting health care programs, services, and organization as well as the role of politics in public health and health policy. Exploration of processes by which health policy proposals are generated, promoted, defeated, modified and implemented. Prerequisites: H 533 with B- or better or HHS 514 with B- or better

H 532. ECONOMIC ISSUES IN HEALTH AND MEDICAL CARE. (3 Credits)
Application of economics principles to the health care field: the demand for medical care and insurance, health care suppliers, health care markets.
H 533. HEALTH SYSTEMS ORGANIZATION. (3 Credits)
Examines the nature of health and health care services and reviews the role of government and the free market on health services. Alternative ways of organizing, financing, and delivery of health care services are explored.

H 534. HEALTH CARE LAW AND REGULATION. (3 Credits)
Legal aspects of health care delivery; tort law and its applications; professional liability and liability insurance; laws relative to health care institutions, cost controls, antitrust and access.

H 535. INTERPRETING EPIDEMIOLOGIC EVIDENCE. (3 Credits)
Intended for students in the human sciences and allied health fields. Introduces basic epidemiology concepts. Topics will include measures of disease frequency, assessing population health, causal logic, quantifying associations between exposures and health outcomes, epidemiologic study design, and threats to study validity (random error, bias, confounding). Examples focus on application of epidemiological methods to a variety of health-related fields.

H 536. HEALTHCARE ORGANIZATION LEADERSHIP THEORY AND BEHAVIOR. (3 Credits)
Overview of organization theory and behavior in health care organizations. Emphasis is on developing an understanding of the factors and forces that influence the structures, behaviors, and operations of health care delivery organizations. This understanding will be developed through consideration of organizations, their environments, and the roles of individuals working in management.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better

H 537. INJURY EPIDEMIOLOGY. (3 Credits)
An overview of the distribution and determinants of injuries, methodological issues specific to injury epidemiology, and approaches to injury control.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 513 with B- or better

H 538. PUBLIC AND PRIVATE HEALTH INSURANCE. (3 Credits)
Introduction to the principles and practices of public or social and commercial health insurance, and their financial reimbursement mechanisms.

H 540. WATER AND HUMAN HEALTH. (3 Credits)
Critically examine the complex relationship between water quality, human activities, and population health.

H 541. AIR QUALITY AND HUMAN HEALTH. (3 Credits)
Examination of the major sources of air pollution, its impact on ecosystems and climate change, and population health. Will also discuss technologies and introduce regulations that are used to control air pollutants.

H 542. ENVIRONMENTAL AND OCCUPATIONAL HEALTH RISK ASSESSMENT. (3 Credits)
Understand concepts, principles and practices in modern environmental and occupational risk analysis and how they are utilized to make evidence-based decisions by regulatory agencies.

H 543. EXPOSURE SCIENCE I. (4 Credits)
Overview of the concepts, principles and practices in modern environmental and occupational exposure assessment. Exposure Science I provides a broad introduction to environmental and occupational exposure assessment methods, while Exposure Science II focuses on sampling and measurement methods.

H 544. ENVIRONMENTAL AND OCCUPATIONAL EPIDEMIOLOGY. (3 Credits)
Examines exposure assessment methodology and epidemiological study designs that are commonly used in environmental and occupational health science in order to characterize the impact of environmental and occupational exposures on population health.
Prerequisites: H 525 with C or better

H 545. OCCUPATIONAL HEALTH. (3 Credits)
A broad overview of occupational health including recognizing and preventing risks from toxic chemical, radiation and physical hazards in the workplace.

H 546. PHYSICAL AGENTS AND HUMAN HEALTH. (3 Credits)
Focus on physical agents (heat, noise, vibration, radiation) and health risks associated with these agents. It covers the range and sources of exposure to physical agents, methods of characterizing these exposures, effects on human health, and the regulations/standards that set limits for physical agents. Lec/lab.

H 547. GIS AND PUBLIC HEALTH. (4 Credits)
Applications of geographic information systems (GIS) to public health are reviewed, including mapping, spatial analysis methods, estimating access, and exposure assessment. This course is geared toward individuals involved in public health who have no (or introductory level) knowledge of GIS. Lec/lab.

H 548. PUBLIC HEALTH TOXICOLOGY. (3 Credits)
Introduction to the concepts and principles of toxicology as they apply to environmental and occupational health.

H 549. MASS MEDIA AND HEALTH. (3 Credits)
Examines the effects of mass media on population health, from the negative impact of advertising of cigarettes, alcohol and junk food, to the (hopefully) positive impact of public health campaigns.
Prerequisites: H 571 with C or better

H 550. SOCIAL EPIDEMIOLOGY. (3 Credits)
Explores the social determinants of health at the population level. Primary focus is on introduction to methods specific to social epidemiology, but will also provide an overview of current understanding of the empirical associations between social factors and health.
Prerequisites: H 525 with B or better

H 551. APPLIED EPIDEMIOLOGICAL ANALYSIS OF SECONDARY DATA. (3 Credits)
Practical experience performing a hypothesis-driven epidemiological analysis utilizing secondary surveillance or other appropriate data set, writing an analytical plan, appropriate programming for the analysis (using STATA or SAS), understanding the analysis output, preparing tables, and interpreting results.
Prerequisites: H 526 with B- or better and H 560 [B-] and H 580 [B-]

H 552. DISASTER EPIDEMIOLOGY. (3 Credits)
Describe the impact of natural and manmade disasters on human health, understand epidemiologic methods specific to disasters, and apply fundamental epidemiologic methods to identify and characterize disaster-related adverse health outcomes.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better
H 554. EPIDEMIOLOGY OF AGING. (3 Credits)
An overview of the core principles of the epidemiology of aging is provided. There will be an emphasis on health and disease processes in older adults. Students will learn essential study design and analytic issues that may arise in studies of aging.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better

H 555. CANCER EPIDEMIOLOGY. (3 Credits)
Introduction to basic concepts and methodology in cancer epidemiology.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better or H 525 with B- or better or H 535 with B- or better

H 556. STRATEGIC MANAGEMENT OF HEALTH SERVICE ORGANIZATIONS. (3 Credits)
Theories and methodologies of long-range planning and strategic management in health care organizations.

H 557. FINANCIAL MANAGEMENT OF HEALTH CARE ORGANIZATIONS. (3 Credits)
Utilization of standard financial tools needed to manage the capital resources of health care organizations. Includes funding capital projects, product costing, budgeting methods, capital formation and investment strategies.

H 558. REIMBURSEMENT MECHANISMS. (3 Credits)
Techniques used in cost-effectiveness analysis. Examples are drawn from the public health and health economics literature.

H 560. PUBLIC HEALTH SURVEILLANCE. (3 Credits)
An introduction to public health surveillance systems (national and international) for chronic and infectious diseases. Utility of existing surveillance systems for secondary epidemiological data analysis.
Prerequisites: H 524 with B- or better and H 525 [B-]

H 562. INFECTIOUS DISEASE EPIDEMIOLOGY. (3 Credits)
Understand epidemiologic methods specific to infectious diseases, apply fundamental epidemiologic methods to infectious disease questions, and describe the broad trends in global infectious disease burden. The application methods and principles will be explored through lectures, discussions, assignments and writing projects.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or H 514 with B- or better

H 563. PHYSICAL ACTIVITY EPIDEMIOLOGY. (3 Credits)
Physical activity epidemiology will focus on current research, controversial issues, and methodological problems in the epidemiology of physical activity, exercise, and health.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better or H 525 with B- or better or H 535 with B- or better

H 564. COMPUTING TOOLS AND HEALTH DATA ANALYSIS. (3 Credits)
Modern computational biostatistics for analyzing health data, emphasizing important technologies and methods for data processing and understanding of how they work. Topics will evolve over time as new procedures are developed.
Prerequisites: (H 524 with C or better or HDFS 530 with C or better)

H 565. PUBLIC HEALTH AND WOMEN: SOCIAL AND POLICY ISSUES. (3 Credits)
Public health approach to the identification of women's health needs in the United States and in other countries as it relates to the intersection of race, ethnicity, social class, sexual orientation, age, and ability.

H 566. DATA MINING IN PUBLIC HEALTH. (3 Credits)
An introduction to high-dimensional data analysis and data mining techniques used as an information technology tool to extract previously unknown and potentially useful information from large databases in biology, medicine, and public health.

H 567. LONG-TERM CARE ALTERNATIVES. (3 Credits)
Overview of the long-term care alternatives. Comparisons of nursing homes with community based facilities; adult day care centers, respite to hospice facilities, social HMOs and other services; cost, quality of life and practicality are addressed.

H 568. FINANCING AND ADMINISTRATION OF LONG-TERM CARE. (3 Credits)
Examines the financing and administration of long term care. Emphasis is on a system-wide overview and specific application to nursing facility management.

H 569. MATERNAL AND CHILD HEALTH. (3 Credits)
Women's reproductive health and health of children stressing causation, management, and prevention of public health problems. Epidemiological analysis of morbidity and mortality in children and women of childbearing age; impact of social, political and economic influences on the health of women and children; comparison of issues and problems of industrialized versus developing nations. Consideration of health issues of interest to the many diverse racial and ethnic groups of women and children in the U.S. as well as the global village.

H 571. PRINCIPLES OF HEALTH BEHAVIOR. (3 Credits)
Theoretical approaches to behavior change in health promotion/education research and practice; factors influencing health behaviors, ethical behavior change issues, behavioral interventions for special populations.

H 572. COMMUNITY ORGANIZATION FOR HEALTH PROMOTION AND EDUCATION. (3 Credits)
History, theory, and practice of community organizing for health advocacy; focus on group processes, use of media, leadership, coalitions, grass roots methods and social change.

H 573. INTRODUCTION TO MULTILEVEL/HIERARCHICAL MODELS. (3 Credits)
Introduction to the theory and application of hierarchical models to problems in epidemiology and public health. Hierarchical models will be dealt with using both frequentist and Bayesian frameworks.

H 575. EVALUATION OF HEALTH PROMOTION AND EDUCATION PROGRAMS. (3 Credits)
Provides theoretical and practical bases for program evaluation. Develops basic skills in a variety of approaches to evaluation, including techniques that are particularly suitable for evaluating health promotion, community health improvement, and related health and social services programs. Course learning is synthesized through designing an evaluation framework and methodology for a relevant program.
Prerequisites: H 513 with B- or better or H 515 with B- or better or HHS 514 with B- or better

H 576. PROGRAM PLANNING/PROPOSAL WRITING IN HEALTH/HUMAN SERVICES. (4 Credits)
Planning and preparing of proposals for program initiation, financing, delivery and evaluation in health-related settings; emphasis on funding sources, community, individual, and organizational support.
H 578. INTRODUCTION TO MOLECULAR EPIDEMIOLOGY I. (3 Credits)
A survey of and introduction to the methods and issues arising in
genetics and molecular epidemiology, including key biostatistical
methods, study designs, and technologies used in the conduct of these
studies. Students will gain experience conducting critical reviews of
research papers with respect to study design and biostatistical analysis.
Prerequisites: (H 524 with C or better and H 526 [C])

H 580. LINEAR REGRESSION AND ANALYSIS OF TIME TO EVENT DATA. (4
Credits)
Multiple linear regression analysis for measurement data and survival
analysis methods for time to event health data, including modes of
inference, diagnostics, model selection, and reporting conclusions. Lec/
lab.
Prerequisites: (H 524 with C or better or HDFS 530 with C or better)

H 581. GENERALIZED LINEAR MODELS AND CATEGORICAL DATA
ANALYSIS. (4 Credits)
Biostatistical methods focusing on binary and count data will provide
a foundation for understanding and implementing generalized linear
regression and categorical data models that are commonly used to
analyze epidemiological and public health data from cohort, case-control,
and clinical trial study designs. Lec/lab.
Prerequisites: H 581 with C or better

H 582. ANALYSIS OF CORRELATED HEALTH DATA. (3 Credits)
Biostatistical methods for clustered, repeated measures, and longitudinal
correlated health data, with an introduction to applications of linear and
generalized linear mixed models and generalized estimating equations.
Prerequisites: H 581 with C or better

H 583. ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY
MANAGEMENT. (4 Credits)
Studies the design and management principles and practices in the
environment, safety and health field.

H 584. ANALYSIS OF INTERVENTION STUDIES AND CLINICAL TRIALS. (3
Credits)
Principles of data analysis from intervention studies and clinical trials,
including professional graphical and tabular presentation, reproducibility
and reliability of measurements, and controlling the Type I error rate when
analyzing multiple endpoints. Basic principles of designing experiments
are also covered including blocking, stratification, interaction, and control
of variability.
Prerequisites: (H 524 with C or better or HDFS 530 with C or better)

H 585. ENVIRONMENT, SAFETY AND HEALTH POLICY AND LAW. (3
Credits)
Survey of the environment, safety and health policy and law in the United
States. Furnishes the basic knowledge and general understanding about
policy and law-related issues important to all environmental health and
safety professionals.

H 586. BAYESIAN BIOSTATISTICS IN PUBLIC HEALTH. (3 Credits)
An examination of methods for designing and implementing Bayesian
analysis to address scientific questions through hands-on experience
with health data. This survey course also covers proper interpretation
and communication of results from practical Bayesian methods for
biostatistics data analysis, with illustrations of the utility of Bayesian
ideas in public health.
Prerequisites: H 581 with C or better

H 587. TIME TO EVENT ANALYSIS OF HEALTH DATA. (3 Credits)
Biostatistical models and methods for survival analysis of time to event
data that are routinely encountered in biomedical and health research.
Prerequisites: (H 524 with C or better or HDFS 530 with C or better)

H 588. APPLIED OCCUPATIONAL SAFETY AND HEALTH. (3 Credits)
The management and technical aspects of a workplace safety and health
program are identified and assessed. Students completing the course
receive a 30-hour OSHA General Industry card.

H 589. EMERGENCY AND DISASTER MANAGEMENT. (3 Credits)
Study of preparedness, response, recovery and business resumption
strategies, activities and applications needed to effectively deal with
emergency and disaster incidents.

H 590. OCCUPATIONAL ERGONOMICS AND BIOMECHANICS. (3 Credits)
Examines the advanced theories, applications, and contemporary
topics of occupational ergonomics and biomechanics. Topics include
muscle physiology, work-related musculoskeletal disorders, assessing
biomechanical exposure in the workplace, various material handling
assessment tools, 3-Dimensional Static Strength Prediction Program,
human vibrations, and implementing ergonomic interventions.

H 591. SELECTED TOPICS. (1-3 Credits)
Recent changes and advances in public health and health care
administration and their application to special fields of study. Topics vary
from term to term and year to year. This course is repeatable for 9 credits.

H 592. SPATIAL EPIDEMIOLOGY. (3 Credits)
An introduction to methods in spatial epidemiology is provided, including
spatial exploration of health data, quantifying spatial patterns and
clusters, spatial exposure assessment, and explaining patterns and
associations.
Prerequisites: H 547 with C or better and H 581 [C]

H 593. REPRODUCTIVE EPIDEMIOLOGY. (3 Credits)
Focuses on current research, controversial issues, and methodological
problems in the epidemiology of reproductive health.
Prerequisites: H 513 with B- or better or HHS 514 with B- or better or
H 525 with B- or better or H 535 with B- or better

H 594. APPLIED ERGONOMICS. (3 Credits)
Principles of occupational ergonomics for managing optimal worker
performance and well-being.

H 595. DESIGN FOR ENVIRONMENT, SAFETY, AND HEALTH. (3 Credits)
Systematic consideration of environmental, safety, and health concerns
at the earliest possible stage in the lifecycle design engineering of
products, technologies, and manufacturing processes.

H 596. HEALTHCARE EPIDEMIOLOGY. (3 Credits)
Focus on current research, controversial issues, and methodological
problems in the epidemiology of healthcare. Topics include institutional
infection control, medical errors, screening and diagnostic testing, cost-
effectiveness, and others related to the delivery and assessment of
healthcare, with a focus on the US healthcare system specifically.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535
with B- or better or HHS 514 with B- or better
H 597. METHODS IN FOODBORNE DISEASE OUTBREAK INVESTIGATION. (3 Credits)
Focuses on the practical basis for developing and implementing methods for foodborne disease outbreak detection, investigation and control, using recent outbreaks to highlight underlying principles. Biological characteristics of major foodborne disease pathogens, clinical features of the illnesses its causes and epidemiologic presentations of foodborne outbreaks will be reviewed. The implications of these characteristics will be discussed in a problem solving, interactive format that examines theory and practice in the context of recent outbreaks. Strategies to promote timely decision-making will be emphasized.
Prerequisites: H 513 with B- or better or H 525 with B- or better or H 535 with B- or better or HHS 514 with B- or better

H 598. HEALTH POLICY ANALYSIS METHODS. (3 Credits)
Analysis of public policies affecting health care programs, services and organizations and the impact of those programs on citizens. Health services research methods, including data sources for health policy research and health policy literature.
Prerequisites: H 513 with B- or better and H 533 [B-]

H 599. SPECIAL TOPICS. (1-16 Credits)
This course is repeatable for 24 credits.

H 601. RESEARCH AND SCHOLARSHIP. (1-16 Credits)
PREREQ: Departmental approval required.
This course is repeatable for 16 credits.

H 603. THESIS. (1-16 Credits)
This course is repeatable for 999 credits.

H 605. READING AND CONFERENCE. (1-16 Credits)
This course is repeatable for 16 credits.

H 606. PROJECTS. (1-16 Credits)
This course is repeatable for 16 credits.

H 607. SEMINAR. (1-16 Credits)
This course is repeatable for 16 credits.

H 608. WORKSHOP. (1-16 Credits)
This course is repeatable for 16 credits.

H 610. INTERNSHIP. (1-16 Credits)
This course is repeatable for 16 credits.

H 612. DOCTORAL SEMINAR IN PUBLIC HEALTH: RESEARCH AND PRACTICE. (1 Credit)
Focuses on learning to identify key stakeholders in the politics of global health, and to be able to describe political and policy processes involved in negotiating global health decisions. Employment of theories and evidence from both the global North and South to explain political processes affecting public health practice and programs.

H 613. INDEPENDENT RESEARCH PROJECT. (1-9 Credits)
Independent research project for PhD students, including research design, execution or research, and the formal presentation of findings in written form. Student will develop an original research topic based on knowledge and review of the literature in a public health-relevant area of inquiry. Graded P/N.
This course is repeatable for 9 credits.

H 614. RESEARCH MANUSCRIPT. (4 Credits)
PhD students write a manuscript to submit to a peer-reviewed journal as part of the course requirements. Graded P/N.

H 615. ADVANCED EVALUATION AND RESEARCH DESIGN. (3 Credits)
Provides an in-depth examination of advanced research designs and methods for establishing causal statements about the efficacy, effectiveness and generalizability of public health and social service interventions designed to alter public health and social risk or protective factors.

H 620. ADVANCED TOPICS IN GLOBAL HEALTH INTERVENTION AND PRACTICE. (3 Credits)
Examines the processes and tools involved in planning and evaluating culturally competent health and human service prevention and intervention programs in the global context. Special considerations in program decision-making in the global context (community engagement, cultural competence, sustainability, feasibility, political/ethical issues) will be explored. Provides a key forum for doctoral students to share ongoing developments in their research and practice drawing from fieldwork as well as attended conferences and meetings.

H 622. GLOBAL HEALTH SYSTEMS, POLICY AND POLITICS. (3 Credits)
Focuses on learning to identify key stakeholders in the politics of global health, and to be able to describe political and policy processes involved in negotiating global health decisions. Employment of theories and evidence from both the global North and South to explain political processes affecting public health practice and programs.

H 626. GLOBAL HEALTH SYSTEM FINANCE AND STRENGTHENING. (3 Credits)
Introduces an analytical framework of health system finance strengthening for global health, from local community to national level and international level. Develops the analytical skill and knowledge for examining the source and mechanism of financing health systems and identify, mobilize, organize, and manage domestic and global health resources. Provides training to examine equity and efficiency of financial burden in a health system, and the strategies to strengthen it.

H 630. QUANTITATIVE HEALTH POLICY RESEARCH METHODS I. (4 Credits)
Contemporary doctoral-level quantitative health policy/services research methods emphasizing linear regression models, data sources for health policy research, and health policy research literature.
Prerequisites: H 524 with B- or better

H 632. APPLIED HEALTH ECONOMICS. (4 Credits)
Advanced doctoral-level quantitative health policy/services research methods emphasizing causal inference when potential endogeneity is present.
Prerequisites: H 630 with B- or better

H 635. COST EFFECTIVENESS ANALYSIS IN HEALTH AND MEDICAL CARE. (3 Credits)
The primary objective of this course is to introduce students to cost-effectiveness studies in health and medical care. Covers the core concepts of CEA, quality adjusted life years, cost calculations, and decision rules.

H 638. PUBLIC AND PRIVATE HEALTH INSURANCE. (3 Credits)
Introduction to the principles and practices of public or social and commercial health insurance, their finance mechanisms, and theoretical foundation behind the selection of certain system of health insurance and finance method.
Prerequisites: H 533 with C or better
H 639. COMMUNITY-BASED PARTICIPATORY RESEARCH. (4 Credits)
Focuses on initiating and conducting research in partnership with communities. Includes in-depth examination of community-based participatory research (CBPR) elements, principles, theories, and approaches; how researchers can successfully partner with communities; and research with minority and/or underprivileged communities; with examples from environmental health, gerontology, and health promotion.

H 642. ENVIRONMENTAL AND REGULATORY RISK ASSESSMENT. (3 Credits)
Understand concepts, principles and practices in modern risk analysis and how they are utilized to make evidence-based decisions in public health. Focus will be on real world examples of risk assessment by environmental and occupational regulatory agencies.

H 650. REPORTING RESULTS: WRITING FOR EPIDEMIOLOGY. (3 Credits)
Applied experience writing a scientific paper to disseminate results, including deciding on authorship, preparing a lay summary, revising and responding to peer review, and serving as a reviewer.
Prerequisites: H 526 with B- or better and H 551 [B-] and H 580 [B-]

H 651. ADVANCED EPIDEMIOLOGICAL METHODS. (4 Credits)
Covers advanced topics in epidemiology. Course expands on many of the same topics as H 526, and explores them in greater breadth and depth. Topics include causal theory, measures of disease and association, confounding, selection bias, predictive models, directed acyclic graphs, effect modification, mediation, indirect and direct effects, study design, and other contemporary topics.
Prerequisites: H 526 with B- or better and H 581 [B-]

H 652. CAUSAL INFERENCE IN EPIDEMIOLOGY. (3 Credits)
Discussion of the theoretical framework of causal statistics and the development of modern methods including propensity scores and marginal structural models. Focus is on the inverse probability of treatment weighting; discussion of other estimation methods will be included. Additional topics may include longitudinal causal models, causal mediation, instrumental variables, and other contemporary topics.
Prerequisites: H 651 with B- or better

H 653. MEASUREMENT OF HEALTH BEHAVIOR CONCEPTS. (4 Credits)
Provides in-depth study and field work for graduate students in public health and related fields of the methods used in the conceptualization, development, and evaluation of quantitative measures of health behavior and related concepts.

H 673. DEVELOPMENT OF HEALTH BEHAVIOR INTERVENTIONS. (3 Credits)
Examines the application of social/behavioral theories in health promotion interventions and in conducting intervention research in diverse populations. The course will focus on program development, on implementation strategies, and on translation into practice.

H 675. ADVANCED TOPICS IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY. (3 Credits)
Examines topics of relevance to health promotion and health behavior. Specific topics include current issues and emerging research findings, with a focus on social and behavior science perspectives, analysis of public health problems, and application of principles and practices of health promotion and health behavior.
This course is repeatable for 6 credits.

H 676. ADVANCED TOPICS IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY. (3 Credits)
Advanced topics in the environment, safety and health discipline. Content varies with each offering.

H 682. ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY: MOVING FROM RESEARCH TO PRACTICE. (3 Credits)
An examination of research transfer models that can be adapted and implemented to environmental and occupational settings. Case studies and content will vary with each course offering.

H 683. ADVANCED RESEARCH METHODS IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH. (3 Credits)
Covers advanced methods for environmental and occupational health research, including framing environmental and occupational health issues into testable hypotheses, designing appropriate studies, and identifying strengths and weaknesses of different research methods.

H 684. ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY. (3 Credits)
Examines the diversity among the older population in health status, health beliefs/behaviors, and health care, and explores the interaction of culture and structure as determinants of their life chances. The empirical literature used in the course is drawn from the experiences of aging of African-American, Latino, and Asian-Pacific Islander elderly. Taught spring term even years. CROSSTLISTED as HDFS 685.
Equivalent to: HDFS 685

H 699. SPECIAL STUDIES. (1-16 Credits)
This course is repeatable for 16 credits.