

# GERONTOLOGY

## Interdepartmental Undergraduate and Graduate Minors and Graduate Degree Programs

The gerontology program is designed for students interested in improving their understanding of adult development and aging across contexts and desiring careers in a variety of aging-related fields. Graduates understand the ways in which individual and societal aging influence, and are impacted by, developments in their major field of study. They have an appreciation and understanding of the interdisciplinary aspects of human aging.

### Undergraduate

Undergraduate students may elect to minor in Gerontology, complementing their major. Courses prepare students to apply aging-related expertise to their field of study.

### Graduate

Students enrolled in the on-campus master's and doctoral programs are able to choose a home department in any unit across campus including, but not limited to Design, Human Development and Family Studies, Kinesiology, Political Science, School of Education, and Sociology. Students take courses and engage in research and outreach to develop the necessary interdisciplinary breadth which, in combination with other disciplinary training, can prepare them for diverse career pathways. Students work with their Major Professor and Program of Study Committee members to chart a course of study. Current Iowa State graduate students can enroll in the Gerontology graduate minor.

Students enrolled in the online graduate certificate and master's programs take courses from experts across partnering institutions to prepare them for translational and applied positions in the field of aging. The program is designed to be flexible and meet student needs.

## Undergraduate Study

Undergraduate study in this program provides the student with an opportunity to develop a minor in gerontology. A balanced grouping of courses assists the student in developing both a sensitivity to the issues and the ability to synthesize ideas from the variety of disciplines important to the study of the aging process.

### Minor

Undergraduate students may minor in gerontology by taking 16 semester hours of gerontology related courses. Nine of these credits must come from the following courses:

|           |                           |   |
|-----------|---------------------------|---|
| GERON 373 | Death as a Part of Living | 3 |
| GERON 377 | Aging and the Family      | 3 |

|           |   |   |
|-----------|---|---|
| GERON 378 | Retirement Planning and Employee Benefits | 3 |
| GERON 463 | Environments for the Aging                | 3 |

Students will participate in a prepracticum seminar, GERON 466 Gerontology Prepracticum Seminar, and will complete a supervised field practicum after all gerontology coursework is completed (GERON 467 Gerontology Practicum). A minimum of 3 semester credits must be selected from a list of supportive gerontology related courses. Supportive courses include units or topics related to aging and can be used to complement the student's major interests. The minor must include at least 9 credits that are not used to meet any other department, college, or university requirement. The student's minor program must be approved by the undergraduate gerontology coordinator.

## Graduate MINOR

A graduate minor in Gerontology is available to any current ISU graduate student and consists of a minimum of 12 credits taken from a list of acceptable courses, and from at least two departments. Nine of the 12 credits must be in courses that are focused specifically on aging. One 590 course (3 credits maximum) can be taken as part of the 12 credits. At least one member of the Gerontology faculty will be on a student's Program of Study Committee.

## ON-CAMPUS PROGRAMS

Our on-campus Gerontology master's and doctoral degree programs are interdepartmental in nature. This means students receive content and training in Gerontology as well as a complementary discipline. We believe an interdisciplinary and collaborative approach allows students to enhance their experiences, training, and skills and ultimately their marketability and career success. Students work with their Major Professor and committee members to craft a program of study which encompasses core Gerontology and home department curriculum while fitting the unique needs of the student.

## ONLINE PROGRAMS

Iowa State University offers a Master's degree in Family and Consumer Sciences with specialization in Gerontology. This is an interinstitutional online program offered through the Great Plains Interactive Distance Education Alliance (or GPIDEA). The student selects a home institution (Iowa State), which ultimately grants the degree. After admission to Iowa State, the student takes courses from Iowa State and the other participating institutions North Dakota State University, Oklahoma State University, Texas Tech University, and University of Arkansas.

The master's degree consists of 36 credits, 24 required credits and 12 elective credits (<https://online.hs.iastate.edu/graduate-degrees/gerontology/>). This program does not require a thesis.

## Graduate Certificate

The 15-credit Graduate Certificate in Gerontology (<https://online.hs.iastate.edu/graduate-degrees/gerontology/>) is offered completely online through the Great Plains Interactive Distance Education Alliance (or GPIDEA). The student selects a home institution (Iowa State), which ultimately grants the certificate. After admission to Iowa State, the student takes courses from Iowa State and the other participating institutions North Dakota State University, Oklahoma State University, Texas Tech University, and University of Arkansas. This is a stand-alone graduate certificate available to any student with a bachelor's degree.

### Courses primarily for undergraduates:

#### **GERON 234: Adult Development**

(Cross-listed with HD FS). (3-0) Cr. 3. S.

*Prereq: HD FS 102 or PSYCH 230*

Introductory exploration of the health, individual and social factors associated with adult development including younger adulthood, middle age and older adulthood. Information is presented from a life-span developmental framework.

#### **GERON 373: Death as a Part of Living**

(Cross-listed with HD FS). (3-0) Cr. 3. F.S.Alt. SS., offered even-numbered years.

*Prereq: HD FS 102*

Consideration of death in the life span of the individual and the family with opportunity for exploration of personal and societal attitudes.

#### **GERON 377: Aging and the Family**

(Cross-listed with HD FS). (3-0) Cr. 3. F.Alt. SS., offered odd-numbered years.

Interchanges of older adults and their families. Emphasis on role changes, social interaction, and independence as influenced by health, finances, life styles, and community support.

Meets U.S. Diversity Requirement

#### **GERON 378: Retirement Planning and Employee Benefits**

(Cross-listed with HD FS). (3-0) Cr. 3. S.

*Prereq: 3 credits in Economics or Personal Finance*

Financial needs analysis for retirement, characteristics of employer-sponsored and individual retirement plans, tax implications of retirement plans, Social Security funding and benefits, strategies for meeting varying retirement needs in a diverse society, financial counseling and planning practice, and overview of employee benefits.

Meets U.S. Diversity Requirement

#### **GERON 414: Gerontechnology in Smart Home Environments**

(3-0) Cr. 3. F.

*Prereq: Com S 227 or (Com S 207 or Geron 377 or ArtGr 271) or equivalent.*

An interdisciplinary course designed for students who are interested in assistive technology, pervasive computing, mobile computing and principles of universal and inclusive design for end users, in particular, the elderly population. Students will work in semester-long projects as interdisciplinary teams to apply knowledge obtained from lectures and mutual presentations. For graduate credit students are required to submit a research report and give an oral presentation.

#### **GERON 415: Gerontechnology in Smart Home Environments**

(3-0) Cr. 3. F.

*Prereq: Com S 227 or (Com S 207 or Geron 377)*

An interdisciplinary course designed for students who are interested in assistive technology, pervasive computing, mobile computing and principles of universal software design for end users, in particular the elderly population. Students will have the chance to learn both about the theories and principles about aging and assistive technology, as well as to engage in the practical semester-long project while working with students from other disciplines.

#### **GERON 463: Environments for the Aging**

(Dual-listed with GERON 563). (3-0) Cr. 3. S.

*Prereq: HD FS 360 or 3 credits in housing, architecture, interior design, rehabilitation, psychology, or human development and family studies or permission of instructor*

Emphasis on independent living within residential settings including specialized shelter, supportive services and housing management. Application of criteria appropriate for accessibility and functional performance of activities; universal design principles. Creative project provides service learning opportunities.

Meets U.S. Diversity Requirement

#### **GERON 466: Gerontology Prepracticum Seminar**

(1-0) Cr. 1. F.S.SS.

*Prereq: 9 credits in core courses for the gerontology minor and approval of the gerontology undergraduate coordinator*

Prepracticum training for students planning a gerontology practicum. Exploration of possible agencies for the practicum, in-depth study of a selected agency, and development of goals and objectives for the practicum.

#### **GERON 467: Gerontology Practicum**

Cr. 3-6. Repeatable. F.S.SS.

*Prereq: GERON 466, advance reservation*

Supervised field experience related to aging. Offered on a satisfactory-fail basis only.

**GERON 490: Independent Study**

Cr. arr.

Consult program coordinator for procedure.

**Courses primarily for graduate students, open to qualified undergraduates:**

**GERON 501: Seminar**

Cr. arr. Repeatable. F.S.SS.

**GERON 510: Survey of Gerontology**

Cr. 1-3. Repeatable. S.

Provides an overview of important gerontological issues.

**GERON 514: Gerontechnology in Smart Home Environments**

(3-0) Cr. 3. F.

*Prereq: COM S 227 or (COM S 207 or GERON 377 or ARTGR 271) or equivalent.*

An interdisciplinary course designed for students who are interested in assistive technology, pervasive computing, mobile computing and principles of universal and inclusive design for end users, in particular, the elderly population. Students will work in semester-long projects as interdisciplinary teams to apply knowledge obtained from lectures and mutual presentations. For graduate credit students are required to submit a research report and give an oral presentation.

**GERON 521: Biological Principles of Aging**

(Cross-listed with EEOB). (3-0) Cr. 3. SS.

*Prereq: BIOL 211 and BIOL 212*

Basic biological principles of aging. Course modules include an introduction to the aging process, body systems and normal aging, and environment and the biology of aging. In addition, disorders and diseases of aging, prevention and treatment and exercise and aging topics will be covered.

**GERON 522: Long-Term Care**

(3-0) Cr. 3. F.

Administration principles involved in the planning, organizing and directing of long-term care agencies. Includes an in-depth exposure to federal and state standards and regulations governing long-term care.

**GERON 523: Mental Health and Aging**

(3-0) Cr. 3. S.

Introduction to the range of issues involved in aging and mental health. From a systems framework the major emotional and psychiatric problems encountered in old age will be examined including mood, anxiety, adjustment and personality disorders, dementia, cognitive problems, substance abuse, and suicide. Barriers to treatment and cohort and cultural issues will be explored.

**GERON 524: Cognitive Health**

(3-0) Cr. 3. SS.

Cognitive skills form the foundation for functioning in everyday life and these skills take on added importance in older adulthood. This course focuses on selected theoretical approaches and current research related to cognitive aging. We will review normative and non-normative cognitive changes, assessment techniques, and prevention/intervention efforts. Throughout the course we will keep the role of environment and life-span implications in the forefront of our discussion.

**GERON 530: Perspectives in Gerontology**

(Cross-listed with HD FS). (3-0) Cr. 3. F.

Overview of current aging issues including theory and research, critical social and political issues in aging, the interdisciplinary focus of gerontology, career opportunities, and aging in the future.

**GERON 534: Adult Development**

(Cross-listed with HD FS). (3-0) Cr. 3. S.

Exploration of the biological, psychological and social factors associated with aging. Although the focus is on the later years, information is presented from a life-span developmental framework. Empirical studies are reviewed and their strengths, limitations and implications for normative and optimal functioning are discussed.

**GERON 540: Nutrition and Physical Activity in Aging**

(Cross-listed with DIET). (3-0) Cr. 3. F.

WWW only. Basic physiologic changes during aging and their impacts in health and disease. The focus will be on successful aging with special emphasis on physical activity and nutrition. Practical application to community settings is addressed.

**GERON 545: Economics, Public Policy, and Aging**

(Cross-listed with HD FS). (3-0) Cr. 3. F.

Policy development in the context of the economic status of the older adult population. Retirement planning and the retirement decisions; social security and public transfer programs; intra-family transfers to/from the aged; private pensions; financing medical care; prospects and issues for the future.

**GERON 563: Environments for the Aging**

(Dual-listed with GERON 463). (Cross-listed with HD FS). (3-0) Cr. 3. S.

*Prereq: HD FS 360 or 3 credits in housing, architecture, interior design, rehabilitation, psychology, or human development and family studies or permission of instructor*

Emphasis on independent living within residential settings including specialized shelter, supportive services and housing management. Application of criteria appropriate for accessibility and functional performance of activities; universal design principles. Creative project provides service learning opportunities.

Meets U.S. Diversity Requirement

**GERON 571: Design for All People**

(Cross-listed with ARCH). (3-0) Cr. 3. S.

*Prereq: Graduate or Senior classification*

Principles and procedures of inclusive design in response to the varying ability level of users. Assessment and analysis of existing buildings and sites with respect to standards and details of accessibility for all people, including visually impaired, mentally impaired, and mobility restricted users. Design is neither a prerequisite nor a required part of the course. Enrollment open to students majoring in related disciplines. Credit counts toward fulfillment of History, Theory, Culture requirements. Meets U.S. Diversity Requirement

**GERON 577: Aging in the Family Setting**

(Cross-listed with HD FS). (3-0) Cr. 3. S.

*Prereq: 9 credits in social sciences or permission of instructor*

Theories and research related to personal and family adjustments in later life affecting older persons and their intergenerational relationships. Related issues including demographics also are examined through the use of current literature.

**GERON 584: Program Evaluation and Research Methods in Gerontology**

(Cross-listed with HD FS). (3-0) Cr. 3. S.

Overview of program evaluation, research methods, and grant writing in gerontology. Includes application of quantitative and qualitative methods in professional settings.

**GERON 589: Systems Neuroscience: Brain, Behavior, and Nutrition-Related Integrative Physiology**

(Cross-listed with FS HN, NEURO, NUTRS, PSYCH). Cr. 2. S.

*Prereq: Graduate standing, or undergraduate with consent of instructor.*

Structural, functional, and biochemical aspects of brain and non-motor behavior across the human lifespan. Types of neuroimaging used to assess the brain. Current research is leveraged to gauge how nutrition, diseases related to nutrition, and associated physiological processes influence the brain, particularly for common developmental, psychological, and neurological disorders.

**GERON 590: Special Topics**

Cr. arr. Repeatable.

Consult program coordinator for procedure.

**GERON 591: Internship**

Cr. 1-9. Repeatable, maximum of 9 credits. F.S.SS.

Supervised experience in an area of gerontology.

**GERON 594: Professional Seminar in Gerontology**

(Cross-listed with HD FS). (3-0) Cr. 3. SS.

An integrative experience for gerontology students designed to be taken near the end of the degree program. By applying knowledge gained in earlier coursework, students will strengthen skills in ethical decision-making behavior, applying these skills in gerontology-related areas such as advocacy, professionalism, family and workplace issues. Students from a variety of professions will bring their unique perspectives to bear on topics of common interest.

**GERON 599: Creative Component**

Cr. arr. Repeatable. F.S.SS.

**Courses for graduate students:**

**GERON 630: Theories of Aging**

(3-0) Cr. 3. Alt. SS., offered irregularly.

*Prereq: 6 credits in social sciences or permission of instructor*

Historical, contemporary, and interdisciplinary basis of aging theory. Biological, psychological, sociological, and human developmental conceptualizations of aging will be critically assessed. Emphasis will be placed on conceptual models, as well as theoretical development and application within gerontological research and the field of aging.

**GERON 635: Adult Development, Aging, and Health**

(Cross-listed with HD FS). (3-0) Cr. 3. Alt. F., offered odd-numbered years.

*Prereq: HD FS 510 or permission of instructor*

Review of the impact of the growing older adult population as well as individual development and aging on individuals, families, and society. Exploration of theoretical perspectives applied to adult development and aging and distinction of normative and non-normative changes in adulthood. Discussion of methods to assess development across adulthood and consideration of the role of individual and environmental factors impacting efforts to optimize adult development.

**GERON 699: Research**

Cr. arr. Repeatable. F.S.SS.