

AGNG C122: BIOLOGY OF AGING

| Item | Value |
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| Curriculum Committee Approval Date | 04/26/2019 |
| Top Code | 040100 - Biology, General |
| Units | 3 Total Units |
| Hours | 54 Total Hours (Lecture Hours 54) |
| Total Outside of Class Hours | 0 |
| Course Credit Status | Credit: Degree Applicable (D) |
| Material Fee | No |
| Basic Skills | Not Basic Skills (N) |
| Repeatable | No |
| Open Entry/Open Exit | No |
| Grading Policy | Standard Letter (S), • Pass/No Pass (B) |
| Local General Education (GE) | • Area 5B Life Sciences (CB2) |
| California State University General Education Breadth (CSU GE-Breadth) | • CSU B2 Life Science (B2) |

Course Description

Formerly: GERO C122. This course will explore normal versus abnormal changes in aging and the human ability to adapt. Each body system will be reviewed, focusing on how age changes relate to the development of disorders and diseases in later life. Methods of assisting older persons in adapting to acute and chronic illnesses and in health promotion and maintenance will be discussed. Enrollment Limitation: BIOL C120; students who complete AGNG C122 may not enroll in or receive credit for BIOL C120. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Interpret and apply major biological theories and principles of aging to determine their impact and implication on the individual and society as a whole.
2. Communicate normal and abnormal changes that accompany aging as well as the ability to adapt.
3. Investigate disease and normal aging processes, document changes to body systems, and support conclusions with valid research principles.

Course Objectives

- 1. Present and apply major theories in the field of biological aging.
- 2. Interpret biological age-changes and make recommendations for adaptation.
- 3. Distinguish normal age change from disease.

Lecture Content

Overview of biological aspects of aging
 Methods used to study aging
 Aging demographics
 Aging stereotypes
 Ability to change and adapt
 Common terms related to aging and physiology
 Theories of aging
 Current ideas of the causes of aging
 Key lifestyle factors which affect healthy

aging
 Thoughts on maximum life span
 Physiological processes in maturity and aging
 Life expectancy vs. life span
 Definition of senescence
 Individual (non-disease related) changes in body systems
 Sexuality
 Individual (non-disease related) changes in body systems
 Diseases and disorders

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)

Instructional Techniques

The classroom delivery method may include lecture, discussion, question-and-answer sessions, small-group problem solving and/or case-study reviews based on real-life situations. The lecture format may utilize PowerPoint presentations, guest speakers, and field trips.

Reading Assignments

Assigned readings, library assignments, case studies, and/or interviews may be assigned.

Writing Assignments

Students may complete essays or research reports that require them to analyze, interpret, evaluate, and synthesize primary and/or secondary biological data and draw appropriate conclusions and to present their conclusions in a well-organized and clearly written format

Out-of-class Assignments

Reading and written assignments, research assignments, preparation of content to share with the class on discussion boards and responses to content presented, analysis of case studies and review of expert interviews, responses to guiding questions on course content, identifying applicable podcasts, and/or self assessments.

Demonstration of Critical Thinking

Examples include research assignments, preparation of content to share with the class on discussion boards and responses to content presented, analysis of case studies and review of expert interviews, responses to guiding questions on course content, self-assessments

Required Writing, Problem Solving, Skills Demonstration

Preparation of content to share with the class on discussion boards and responses to content presented.

Eligible Disciplines

Biological sciences: Master's degree in any biological science OR bachelor's degree in any biological science AND master's degree in biochemistry, biophysics, or marine science OR the equivalent. Master's degree required. Gerontology: Master's degree in gerontology OR the equivalent OR see interdisciplinary studies. Master's degree required.

Textbooks Resources

1. Required DiGiovanna, Augustine Gaspar. Human Aging: Biological Perspectives (Custom), 2nd ed. ISBN: 9780077407209: McGraw-Hill, 2009
 Rationale: - Legacy Textbook Transfer Data: Legacy text 2. Required Saxon S.V.; Etten M.J.; Perkins E.A. Physical Change Aging: A Guide for the Helping Professions, 7th ed. N.Y.: Springer Publishing Co, 2021
 Rationale: -

Other Resources

1. Coastline Library