

**Biogerontology
GRNT 6010
Institute of Gerontology
255 E. Hancock**

Instructor:

M. Elaine Cress, PhD
Associate Professor
Department of Exercise Science and faculty of Gerontology

Course description:

The Biogerontology course integrates cutting edge animal research with the latest clinical studies in human aging research.

Course Objectives:

The learning objectives for this course are for the student to understand:

1. Biological factors that contribute to the heterogeneity of aging.
2. The contribution of genetics and environment to the aging process.
3. Lifestyle factors that contribute to optimal physical aging.
4. The importance of understanding physiological aging in practice and application.

Required Reading:

Challenges of Biological Aging Edward J. Masoro Springer Publishing Co.

ISBN 0-8261-1277-3

GRNT 6010 Course Pack \$15.72

Athens Blueprint 269 West Dougherty St, Athens, GA

Phone 548-0656

WebCT, E-Mail, and Listserv:

This course will **require** each student to use WebCT and E-Mail. Students are expected to be comfortable in the use of these technologies, or to become so, no later than the second week of classes. Everyone should know that on-line student learning guide and additional resources are available at: <http://webct.uga.edu/hostsys/student/>. All students must possess and maintain a functional e-mail address throughout this course. Please provide me with that address by the end of next class. If you change your e-mail address, it is your responsibility to notify me of your new address. All students are expected to check their e-mails and the WebCT site for this course on a regular basis particularly because this course meets once a week. Announcements sent via e-mail or posted on the WebCT site are the functional equivalent of in-class announcements. Any announcement sent via e-mail or posted on the WebCT site at least 24 hours before the next scheduled class date may be deemed applicable and binding for that next class. Important announcements will be posted on the WebCT site, in addition to e-mail notifications, so that e-mail interruptions are not an acceptable excuse for missed electronic announcements.

Materials to be posted on the course WebCT site will include:

- the course syllabus
- lecture notes, slides, etc.
- assignments & handouts
- readings
- a bulletin board for announcements and discussions
- links pertinent to the content of this course
- contact information for faculty and students involved in this course

We have set up a **Listserv** for this course. This is basically a bulk e-mail service, so that the faculty can originate an e-mail message that will automatically be sent to all the enrolled students and other faculty members. Students cannot originate mail to the members of the list, but may request their local professor-in-charge to do so for them.

You must subscribe yourself to this list to get on it! Here is how to do it. From the e-mail system and e-mail address you will be using, create an e-mail message addressed to: LISTSERV@LISTSERV.UGA.EDU. In the body of the message there should be one line of text: **SUBSCRIBE BIOLOGYGERON-L YOUR NAME**. Put your first name and last name in the *your name* spot. No other text should be in the message, it will mess things up. The subject area of the message is ignored. Send the message. If successful, you will receive an e-mail message back confirming your subscription. If you want the Listserv to send you messages to multiple e-mail accounts, such as at school and at home, subscribe to the list from each account address following the preceding steps. That is all there is to it! For more information about the Listserv, visit <http://www.listserv.uga.edu/>.. Sign up for the listserv by the first week of classes.

Class Time Apportionment:

4:40 - 5: 30	Didactic presentation of material
5:30 - 5:45	Q&A
5:45- 6:00	Break
6:00 - 6:40	Student summary, discussion, and presentation of assigned reading germane to that day's lecture/reading topic. These presentations will be faculty-mentored, and made by students enrolled in this course. This time period includes 5 minutes for Q&A at conclusion of presentation.
6:50 - 7:30	Second student summary and discussion
7:30 – 7:40	Announcements and housekeeping issues.

* **Please note:** The set-aside time for student presentation is a maximum of 30 minutes, but should be no less than 20 minutes. Student presentation periods 'officially' begin on September 16th

Contacting the Instructor

Office hours: by appointment and 3:30 – 4:30 Monday and Tuesday

Email: mecress@coe.uga.edu

Gerontology Center office* 255 E. Hancock Avenue Athens GA 30602-5775 Tel: 706-425-3212 Fax: 706-425-3221	Exercise Science Dept office** 115G Ramsey Center Tel: 706-542-2202
*Usual location is on Tuesday and Thursdays	** Usual location on Monday, Wednesday Friday

Class attendance, absences, etc:

Attendance in class is very important for grasping the overall concepts as well as the nuances needed to grasp and understanding of the aging body. **Check the course calendar to see that there is not a conflict with a scheduled Response Opportunity time and your schedule, provide written notice to Dr. Cress within the first week of classes.**

Response Opportunities are due at the beginning of class one week from the date it is given out. Late responses will be penalized 10%.

Interview Project

Where a person lives is a reflection of their functional status which by in large is a result of their physical ability. People erroneously call retirement communities "nursing homes". Those completing a course in Biogerontology will have a depth of practical knowledge that allows distinguish among these physical environments as that is a practical outcome of human physical aging. Please see the information sheet on the Interview Project in this course pack.

Student – Lead Discussion:

Each student will pick 3 topics (weeks) to lead discussion of the reading material. Three weeks prior to the week of the discussion the student will submit 5 discussion-oriented questions on the assigned material to Dr. Cress for review. Two weeks before the student lead discussion the discussion questions will be made available to the class. The class is responsible for writing out answers to the question (These will be collected). The Student leader will direct the discussion over the assigned reading material using the discussion questions as an aid. Criteria for grading. 1. Ability of the questions to penetrate material. 2. Ability of the discussion to integrate across material from multiple assigned reading sources. 3. Student familiarity with the assigned reading.

Grading:

75% of your grade will be determined by your average grade on three response opportunities. Exams will be take home. Each exam is worth 100 points.

10% of your grade will be determined by your interview project. Projects are due 11/9/2004. Late projects will automatically lose 10%

10% of your grade student – lead discussions

5% of your grade will be determined by the responses to the discussion questions and interaction in class discussions.

The final course grade will be based upon the following grade-point range: A = 90 to 100; B = 80-89; C= 70-79; D = 60-69; F < 60.

Academic Honesty

It is expected that all students are familiar with and will stringently adhere to the University's policies and procedures on academic honesty ("**A CULTURE OF HONESTY AT THE UNIVERSITY OF GEORGIA**"). This can be found on-line at: <http://www.uga.edu/vpaa/polproc/ahpol/main.html>.

Class No.	Date	Readings	Class Lecture Topic
1	Aug.24	Chapter 1 Hayflick p.1-3	Aging: A biological puzzle
2	Aug.31	Chapter 2 Agree & Freedman p.3-14	Aging Demographics
3	Sept. 7	Chapter3 SA p. 63-66	Evolutionary Theory of Aging
4	Sept 14	Chapter 4 Weinart & Timiras p. 15-25	Theories of Aging
5	Sept 21	Chapter 5 SA 45-50 Interview arrangements and pre-interview assignment	Biological Basis of Aging
6	Sept.28	Bales & Ritchie p.37-51 Russell et al. p. 52-54 Take Home Response Opportunity	Nutrition and Aging
7	Oct. 5	Chapter 6 P86-94 Doherty p. 26-36	Body Structure and Composition Skin
8	Oct 12 - 19	Chapter 6 p 94-121 SA: 67-74 Sup: Ritchie & Lovestone p. 55-62 Buysee p. 63-67 Seeman p. 68-77	Neuromuscular and skeletal system Sleep
9	Oct 26	Chapter 6 p 123-146 SA 80-84 Ferrari et al p 78-84	Cardiovascular and respiratory
10	Nov 2	Chapter 6 p 137-159, 168 Kenney & Munce p. 80-84 Take home response opportunity	Renal, GI, Endocrine, thermoregulation
11	Nov 9	Chapter 6 p. 160-167 SA 75-79 SA 51-62: Benagiano & Farris 91-99	Reproduction, immune
12	Nov 16	Chapter 7 p. 171 SA: 39-44 Projects due	Dietary restriction
13	Nov 23	Cress & Meyers 100-110 Cress et al. 111-117	Physical Function Assessment
14	Nov 30	Chapter 7 p 175-181 SA: 25-32 Inui p. 118-121	Lifestyle & Successful aging Anti-aging
15	Dec 7	Interview Projects	Student presentations
16	Dec 16	Final Response Opportunity	

Legal mumbo-jumbo:

The course calendar is tentative, and I reserve the right to make changes in it to accommodate class needs or as may otherwise be didactically advisable.