Course: Biomedical Sciences 4330, Biological Basis of Aging  
EN 107

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CS 130; 825-6022  
Office Hours: M, T, W, R, F 3:45-4:15  
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Course Description:  
This course is an examination of one phase of the developmental process--the aging organism. The course focuses on human aging, and the topics included in the course are: definitions of aging; demographics of human aging; life span; life expectancy; research methodologies and measurements; anatomical and physiological changes associated with aging; age-related diseases; theories of aging; elder abuse; psychological and sociological aspects of aging; and healthy aging.

Supplies:  
PowerPoint slides printed from Blackboard  
Journal articles printed from Blackboard  
Binder for notes, handouts, articles etc.

Course Objectives: At the conclusion of the course, the student will be able to:  
1. Define aging;  
2. Distinguish between life expectancy and life span;  
3. Discuss the factors that have contributed to increased life expectancy;  
4. Identify methods used to study aging;  
5. Explain the physiological effects of aging in humans;  
6. Describe the relationship between aging and disease;  
7. Distinguish among, evaluate and synthesize theories of aging;  
8. Relate sociological and psychological factors to aging;  
9. Understand caregiver stress;  
10. Identify the signs and symptoms of elder abuse;  
11. Understand the perceptions and experiences of older people; and  
12. Evaluate current interventions to promote healthy aging.

Course Requirements And Grading Points:  
There are only nine class days; the last day of Janmester is final exam day. You must be committed to doing a semester’s worth of work in nine days. There is no opportunity to make up tests or in class work if you are absent.

The Points Required for Each Letter Grade Are:  
500 – 450 = A  
449 – 400 = B  
399 - 350 = C  
399 – 300 = D  
299 and below = F

YOU CANNOT AFFORD TO BE ABSENT FOR A CLASS. ONE AFTERNOON OF CLASS IS EQUIVALENT TO ABOUT TWO WEEKS IN THE FALL OR SPRING SEMESTER. THERE IS NO MECHANISM FOR MAKING UP MISSED ASSIGNMENTS OR TURNING IN WORK THAT IS LATE.
GRADED ACTIVITIES: Work is due on the day/time indicated in the table below and in the agenda table.

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<thead>
<tr>
<th>Activity</th>
<th>Date</th>
<th>Points</th>
<th>Total Points</th>
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<tbody>
<tr>
<td><strong>Tests</strong></td>
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<tr>
<td>Test 1</td>
<td>Thursday 10</td>
<td>110</td>
<td>330</td>
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<td>Test 2</td>
<td>Tuesday 15</td>
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<td>Test 3</td>
<td>Friday 18</td>
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<tr>
<td><strong>Homework &amp; Exercises</strong></td>
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<td>Homework Due: Living to 100</td>
<td>Tuesday 8</td>
<td>15</td>
<td>75</td>
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<tr>
<td>Exercise: Extracting Information</td>
<td>Tuesday 8</td>
<td>15</td>
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<td>Exercise: Elder Abuse 1</td>
<td>Wednesday 9</td>
<td>15</td>
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<td>Exercise: Elder Abuse 2</td>
<td>Friday 11</td>
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<td>Exercise: Caregiver Stress</td>
<td>Monday 14</td>
<td>15</td>
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<td><strong>Oral History Paper</strong></td>
<td>Wednesday 9</td>
<td>75</td>
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<td><strong>Oral History Conclusions</strong></td>
<td>Thursday 17</td>
<td>20</td>
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TESTS:
Each exam may contain questions in the following formats: multiple choice; true/false; matching; fill in the blank; short answer questions; and essay questions. Everything that is discussed in class may on the test. This includes information from lecture, class discussions, journal articles, presentations, pair exercises and videos.

WRITTEN WORK:
1. **Living to 100:** Go to www.livingto100.com/, the Life Expectancy Calculator, and register. Then complete the questionnaire. At the end of the questionnaire, you will receive your calculated life expectancy; print out this page to submit with your homework. Then go to the feedback section to see how many years you can add to your life by changing your behaviors. Your homework is to:
   a. Determine how many more years you could add to your life expectancy by changing your behaviors
   b. Discuss which behaviors you are willing to change and how many more years you can add to your life expectancy by changing these behaviors

   Format: Three pages discussing a and b above; computer generated; 1” margins; single spaced; ≤ 12 pt., stapled

2. **Oral History Project:**
The purpose of this project is to give you an understanding of aging from the perspective of older people. We are interested in finding the similarities and differences among the people interviewed. You will interview two people who are at least 65 years old; the interviews are to be conducted separately, just you and the interviewee. Over the holidays, you will interview a relative or a neighbor or a family friend. It would be more interesting for you if the person were a relative.

You will ask each person the same set of questions. Depending on your interviewee’s responses, you should feel free to ask follow up questions. Interviews should be conducted in person, not via email. You should interview the person privately. You will write down the person’s answers. While it is convenient to record the answers, many people feel very uncomfortable being recorded, so you should avoid recording the interview.
You will ask all your questions in the first session. Be prepared that some people are a little hesitant at first, so give them time to get comfortable talking about themselves. Then, a day or two later, visit the person again to see if he/she has something else to add. Generally, after thinking about the interview, the interviewee has remembered something else to share with you.

We want to preserve anonymity, so in your paper and presentation, do not give the person’s name. We do need to know sex, age, race/ethnicity.

Questions:
1. What was it like when you were 20 years old? Describe what you did for fun when you were that age. What was happening in the world?
2. What is the biggest change you see in the world today compared to the world when you were 20?
3. Looking back on your life, what would you say is the best thing that happened to you?
4. Looking back on your life, what is something you regret doing?
5. Looking back on your life, what is something you regret not doing?
6. What do you think the world will be like in 20 years?

A. The Oral History Paper
Your oral history paper should be in three parts, with the headings and subheadings listed below:
I. Interviewee 1
   a. Demographic information
   b. Responses to the questions
   c. Your impression/evaluation of the interview
II. Interviewee 2
   a. Demographic information
   b. Responses to the questions
   c. Your impression/evaluation of the interview
III. Compare and contrast your two interviews

Format: >6 pages; computer generated; 1” margins; single spaced; ≤ 12 pt., stapled

B. Oral History Conclusions
We will have a class discussion on the results of your projects. Each person will present his/her results. We will compare and contrast the results of the class. At the end of our discussion, you will write a paper synthesizing what we learned.

3. Exercises: You will choose a partner with whom you will do four exercises in class. You will be given the information for the first exercise in class. The other three exercises will be based on journal articles, which will be available on Blackboard. You must read and understand the article before coming to class. You do not have time to read the article and answer the question in the allotted time. I suggest that you print out the article, read and annotate it, then bring it to class to help you answer the questions.

Class Standards:
The student is expected to attend each class. If absent, it is the responsibility of the student to obtain missed information from a classmate. Missed information includes not only missed lecture notes, but also any possible information regarding syllabus changes.
The student has several opportunities to demonstrate competency in the course. Assessment and computation are performed by the instructor according to objective criteria. If a student experiences difficulty in the course, the instructor is available for consultation. However, it
is the responsibility of the student to seek help, preferably when the investment made by the student can still be salvaged.

Academic integrity is expected. Cheating is not acceptable behavior and the student is not to give or receive help during testing. All students are expected to conform to University standards of ethics, academic integrity, grammar and spelling; review the 2012-2013 A&M-CC catalog for more information.

**Cell Phone/Electronic Device Usage:** No cell phone conversations or Internet usage during class.

**Academic Integrity/Plagiarism**
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a grade of 0 for the work.

**Dropping a Class**
Events can sometimes occur that make dropping a course necessary. Consult with me before you drop the course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation will not automatically result in your being dropped from the class.

**Classroom/Professional Behavior**
Some general considerations include:
- Arrive on time for class;
- Allow others to speak; do not monopolize the discussion;
- Focus on the discussion; do not do other work during our meetings;
- Evaluate other points of view; and
- Respect others’ opinions.

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Grade Appeals**
As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at
http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

Disabilities Accommodations
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

References:
Austad, Steven. 1997. Why We Age. John Wiley & Sons
Crowley & Lodge. 2007. Younger next year for women. Workman Publishing
Hayflick, Leonard. 1996. How and Why We Age, Random House, Inc
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Taylor & Briggs. 2009. Age-proofing your brain. Success Resources International
Timiras, Paola. 2007. Physiological Basis of Aging and Geriatrics. Informa Health Care
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www.healthyaging.net
www.mayoclinic.com
www.nia.nih.gov