Fascinating psychological and biological questions cluster around the phenomenon of development and aging. Indeed, various lines of research are helping us to understand the aging process.

In this seminar course we will explore the neurobiological changes that occur during the process of aging and the relationship between these neurobiological changes and the cognitive changes that are experienced in the aged. We will examine both normal age-related changes and the cognitive changes that occur in age related disease states. Some of the questions we will discuss in this course include the following. Does every species age in the same way as the human? Is there a fundamental process of “aging” common to all organisms? How does the aging process deviate from the “normal” to cause aging-related disorders in long-lived species? Can one prevent and/or modify the aging process? What roles do nature and nurture play in this process? Can we learn something from various human lifestyles, diets, cultures, environments and even from other species in order to enhance healthy aging? Indeed, the quest to maintain a healthy, long life by mankind has been going on from time immemorial. Past and current research has focused on beginning to answer some of these questions. As we progress through this course we will observe that advances in aging research are contributed by worldwide researchers who cut across many disciplines.

Text: There is no text book for this course. Instead you will read various journal articles on topics related to aging.

Grading Scheme:

25% Leading In-Class Assigned Readings
16% Short Thought Papers
20% Class Participation
9% Proposal
30% Final Paper

Leading In-Class Assigned Reading Discussions
Each week a group of students will be responsible for presenting the articles to the class and to facilitate discussion of these articles. Each group should work together to come up with a good way to highlight the important issues discussed in the articles and to engage the rest of the class in a thoughtful and critical discussion of those issues. You will be graded on your ability to summarize/highlight the important issues in the articles, your presentation skills, your understanding of the readings, and your ability to lead and engage your peers in a group discussion. Your grade will be based on the group performance and your individual contributions. Each group should submit a near complete ppt of their presentation to me by Tues 5 pm.

**Participation:**

You are expected to read assigned papers before each class and attend regularly. You will be graded on your active participation in our discussions.

**Short Reports:**

Students will be required to submit a weekly thought question/idea/issue based on the assigned readings to our BB discussion board. This question/idea/issue must be posted no later than 9 am of the Tues morning prior to our Wed lecture. You are required to submit the answer to any 4 of your BB postings to me for grading. It is your choice which questions you choose to submit. Your response to your BB posting should be a maximum of 1 page and is due at the start of the lecture. Late papers will not be accepted.

The two main purposes of these assignments are to encourage you to 1) read the work in depth in advance of the class and (2) think about it. A good thought paper will demonstrate that you have read and thought about the readings in the course. The emphasis of the paper should be on some thought, idea, or criticism you have with respect to the material you read. You should identify some issue, and discuss that issue in light of the readings and/or the current research in the field. For example, you may choose to examine a problem with the assigned reading that could have been better addressed, try and extend the research based on current findings (what would be the next step), comment on how the paper integrates the findings with current developments in theories on the topic, or comment on the interpretation of the data analysis and statistical outcomes. Your goal is to clearly state your issue, and then express your thoughts on this issue.

During the lecture some thought questions/ideas may be chosen for class discussion.

**Proposal and Literature Review:**

Each student will write a review paper on a topic approved by me. Approval for the final paper topic must be completed by Feb 6. Please email your topic choice to me no later than this date. A proposal will be required on Feb 27, which should include a detailed outline of the topic you will be focussing on and include a near-complete list of
references. Each student will be required to meet with me individually on this date to discuss their progress. Your proposal will contribute 9% to your final grade.

The final paper will be no longer than 15 pages including the abstract, cover page, and reference pages. You are encouraged to be as concise as possible in this final paper while adequately covering the topic. APA format is required. Late papers will be accepted but docked 10% per day unless a medical note is provided. Please use only the medical form available from UTSC online. Final papers are due at the start of class on April 3, 2013. You are required to bring a paper copy to class and also submit a copy through Turnitin. Details on Turnitin follow and will be discussed at the first class.

**Turnitin:**

First, some background information on this program. Turnitin.com is a tool that assists in detecting textual similarities between compared works i.e.: it is an electronic resource that assists in the detection and deterrence of plagiarism.

*Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University’s use of the Turnitin.com service are described on the Turnitin.com web site.*

As indicated on the turnitin home page, all work submitted to Turnitin is checked against three databases of content:
- A current and archived copy of the publicly accessible Internet
- Millions of published works (from ABI/Inform, Periodical Abstracts, Business Dateline, ProQuest, the Gutenberg Collection of literary classics, and tens of thousands of electronic books)
- Millions of student papers submitted to Turnitin since 1996.

Students will submit all written reports to the turnitin.com site (www.turnitin.com). Detailed instructions on setting up your account can be found on this page. You must set up your own account and will need the following information: Course name, NROD67 2013 Class ID #, 5874588; Class Enrolment Password, oldage.

http://www.turnitin.com

**Tentative Course Schedule**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 9</td>
<td>Course Introduction</td>
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<tr>
<td>Jan 16</td>
<td>Neurobiology of Healthy Aging</td>
<td>Geldmacher 2012</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Readings</td>
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<tr>
<td>Feb 13</td>
<td>Class cancelled</td>
<td>Work on Paper Outline</td>
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<tr>
<td>Feb 20</td>
<td>Reading Week- No classes</td>
<td></td>
</tr>
<tr>
<td>Feb 27</td>
<td>Final Paper Outline Due</td>
<td>Individual appointments scheduled</td>
</tr>
</tbody>
</table>

Readings:


Swerdlow RH (2007). Is aging part of Alzheimer’s disease, or is Alzheimer’s disease part of aging?