Course Description: Alzheimer Disease (AD) is the most common type of neurodegenerative dementia in older adults. Considerable progress has been made in understanding AD, and there are increasing efforts to identify AD as early as possible with the hope that early identification will lead to better outcomes. This course will examine a number of ethical challenges that arise from neuroscientific research aimed at predicting, diagnosing, and treating AD. Some of these key challenges will include: How accurately can we predict the development of AD in healthy individuals? What role, if any, should biomarkers (e.g., genes, brain scans) play in diagnosing AD? What treatment interventions are available for AD, and how effective are they? To what extent should pharmaceutical companies influence research on AD?

Course Prerequisites: Listed on pp. 204-210 of the 2014-15 Academic Calendar http://www.trentu.ca/calendar/

Course Format: Seminars: Wednesdays, 11:00 am to 1:50 pm in CCN M2.
For the latest on classroom locations: http://www.trentu.ca/timetable/ (Ptbo & Oshawa)
Web link to course material on LearningSystem/Blackboard: http://www.trentu.ca/mytrent/

Required Readings: There is no textbook for this course. A list of required readings is available following the Course Schedule.


Academic dishonesty (e.g., plagiarism) will not be tolerated and university policies will be strictly enforced. Please be sure to familiarize yourself with these policies: http://www.trentu.ca/academicintegrity

Learning Outcomes

Students successfully completing this course will be able to:
1. Summarize, synthesize, and critique primary research articles in a variety of formats
2. Develop and support a thesis statement on a topic related to Alzheimer disease
3. Give an oral presentation on a topic related to Alzheimer disease
4. Coherently express one’s ideas in a seminar setting

Withdrawal Deadline Students will have 34% of their grades by the final date for withdrawal without penalty – November 10, 2015.

Evaluation

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1. Seminar Presentation</td>
<td>T.B.D.</td>
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<tr>
<td>2. Major Paper</td>
<td>Nov. 25</td>
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<tr>
<td>4. Thought Papers</td>
<td>On-going</td>
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<tr>
<td>5. Seminar Participation</td>
<td>On-going</td>
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<tr>
<td>6. Course Reflection</td>
<td>Dec. 9</td>
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</table>

It is the responsibility of each student to read and accept the due dates outlined on the syllabus.
Seminar Presentation (10%) – Date T.B.D.
Each student will be required to present an assigned reading in class (to be assigned during the first seminar). The presentation should be approximately 20 minutes in duration. In addition to using the assigned reading, students are also encouraged to use other academic sources (e.g., 1-2 additional sources) for their presentation. Seminar presentations should comprise two parts: a formal presentation of the main points of the assigned reading and a student-led discussion session with the class. For the discussion session, students should prepare a list of questions that they feel will generate discussion amongst the class. Note that there are three sets of assigned readings that are classified as “For Debate”, and presentation of these readings will require 2 students (see Course Schedule). More information about the seminar presentations will be made available during the first week of classes.

Major Paper (30%): Due Nov. 25
Students are required to write a major paper on a topic related to the course. Pages should be 15-20 pages in length (double spaced, excluding title page and references). For your paper, you will be expected to provide a critical review of the literature, and to develop/support a thesis statement. Papers must adhere to the guidelines set out by the American Psychological Association (6th ed.). Papers will be graded according to the following criteria: style, grammar, adherence to APA format, organization, and content. More details about the paper will be made available during the first class.

Outline for Major Paper (8%): Due Oct. 14
To help ensure that students are on the right track, they will be expected to submit an outline of their papers. The outline should comprise two main components. The first component is an overview of the topics to be covered in the paper (like a detailed Table of Contents). The second component is an annotated bibliography of at least 8-10 articles; for each entry in this bibliography, students should clearly indicate how they use that article in their paper (NOTE: your final paper should include more than these 8-10 articles; the outline is simply to ensure that you have started to work on your paper). The instructor will provide useful comments and feedback to help the students write a fourth-year level research paper.

Thought Papers (22%): Due each week, starting with Sept. 23
Students are expected to hand in a thought paper each week that focuses on the assigned readings for that week. Thought papers MUST be typed, and are to be handed in by the end of class (students may wish to keep them during the class to help with their participation). The thought papers should be approximately 1 single-spaced page of critical comments on the assigned readings. Students can choose to write the thought papers in point-form as long as the points they are trying to make are clear to the reader. Students should NOT summarize the assigned readings, nor should they simply make a list of things that they did not understand about the assigned readings. Rather, students are expected to provide a list of critical comments about the assigned readings. Each Thought Paper is worth 2%, and students are expected to hand in a total of 11 Thought Papers (i.e., one each week starting with Sept. 23). Grading of thought papers will be as follows: 0 = student did not hand in a thought paper; 1 = student generated comments; 2 = student generated good quality comments.

Seminar Participation (24%): Every class
This is a fourth-year seminar course. The quality of the course will depend upon how well the class participates during the weekly seminars. In addition to attending class each week, it is absolutely essential that students have read the assigned readings for that week and come to the class prepared to engage in a meaningful discussion about the readings. You are expected to participate in a meaningful way during each seminar. Meaningful participation is defined as answering questions raised during seminar or asking questions that are relevant to the seminar readings or related issues. Participation for each seminar will be worth 2%. Grading of participation will be as follows: 0 = student did not say anything in seminar; 0.5- 1.0 = student made several valuable comments; 1.5-2.0 = student made a number of very insightful comments.
Course Reflection (6%): Due on Dec. 9
Students are required to hand in a 3-page (single-spaced) paper during the last week of classes where they reflect on how their understanding of Alzheimer disease has changed as a result of the course. More specifically, students should comment on what they consider were the top 4-5 most important or useful new topics they learned during the course. It is advisable to be as specific as possible (e.g., do not simply say that you learned a lot about X). It is also advisable to start preparing for this assignment during the course, rather leaving it all to the end.

Course Policy on Late Submissions
The late penalty for all assignments is 5% per day (excluding weekends), unless an extension has been granted before the due date. Please note that this policy does NOT apply to thought papers, which will receive a grade of 0 if not handed in during the scheduled class (see above). Late assignments will not be accepted after they have been graded and handed back to the class, except in those situations in which an extension has been granted before the due date.

Course Policy on attendance in class/labs
Students are expected to attend and participate in all seminars. As detailed above, 24% of the final grade will be based on seminar participation.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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| Sept. 16| Course Introduction and Assignment of Presentation Topics Overview of Alzheimer Disease | Jack et al. (2011)  
McKhann et al. (2011)  
George et al. (2011)  
Maurer, Volk, and Gerbaldo (2000) |
| Sept. 23| Alzheimer Disease – Diagnosis and History                             | Jack et al. (2011)  
McKhann et al. (2011)  
George et al. (2011)  
Maurer, Volk, and Gerbaldo (2000)  
| Sept. 30| Mild Cognitive Impairment Preclinical AD                              | Albert et al. (2011)  
Sperling et al. (2011)  
| Oct. 7  | Genes-Early Onset                                                    | Acosta-Baena et al. (2011) – 1 Presenter  
Bateman et al. (2011) – 1 presenter  
Cox and McKellin (1999) – 1 Presenter |
| Oct. 14 | OUTLINE FOR MAJOR PAPER DUE                                          | Greene et al. (2009a) – 1 Presenter  
Lock (2011) -1 Presenter  
Arribas-Ayllon (2011) -1 Presenter |
| Oct. 21 | Biomarkers                                                           | Schmand, Huizenga, and van Gool (2010) – 1 Presenter  
Wright et al. (2009) – 1 Presenter  
Sperling and Johnson (2010)  
Rockwood (2010) |
<p>| Oct. 28 | Reading Week                                                         | No Readings                                                               |
| Nov. 4  | General Research Issues – I                                          | Jefferson et al. (2008) – 1 Presenter                                     |</p>
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenters</th>
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<tr>
<td>Nov. 11</td>
<td>General Research Issues – II</td>
<td>Molnar, Man-Son-Hing, and Fergusson (2009) - 1 Presenter</td>
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<td></td>
<td>Molnar, Man-Son-Hing, Hutton, and Fergusson (2009) – 1 presenter</td>
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<td>Peters (2013)</td>
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<tr>
<td>Nov. 18</td>
<td>Prevention of Alzheimer Disease</td>
<td>Peters, Beattie, Feldman, and Illes (2013)</td>
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<td>Shumaker et al. (2003) – 1 Presenter</td>
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<td>Snitz et al. (2009) – 1 Presenter</td>
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<td>Nov. 25</td>
<td>MAJOR PAPER DUE</td>
<td>For Debate (cholinesterase inhibitors): Ames (2008), Kaduszkiewicz et al. (2008), Birks (2008), and Ashby (2008) – 2 presenters</td>
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<td>Petersen et al. (2005) – 1 Presenter</td>
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<td>Katz and Peters (2008)</td>
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<td>Dec. 2</td>
<td>Amyloid Hypothesis</td>
<td>[Background - Karran, Mercken, &amp; DeStrooper, 2011]</td>
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<td></td>
<td>Anti-Amloid Drugs</td>
<td>Green et al. (2009b) – 1 Presenter</td>
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<td>Riemersma-van der Lek et al. (2008) – 1 Presenter</td>
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<td>Dec. 9</td>
<td>COURSE REFLECTION DUE</td>
<td>Lindstrom et al. (2006) – 1 Presenter</td>
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<td>Stakeholder Perspectives</td>
<td>Karlawish et al. (2003) – 1 Presenter</td>
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<td>Oremus et al. (2007) – 1 Presenter</td>
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*Note – the papers are listed in the order in which they should be read

**List of Readings**


**NOTE:** there are actually four separate articles for this one: the ‘Introduction’ by Ames, the ‘Yes’ one by Shah and Finucane, the ‘No’ one by Bhattacharyya and Burns, and the ‘Commentary’ one by Flicker and Almeida.


**NOTE:** there are actually four separate articles for this one: the For Debate:...’ by Ames, the ‘Evidence is not convincing’ one by Kaduszkiewicz, van den Bussche, and Zimmermann, the ‘Evidence for the efficacy of cholinesterase inhibitors in the treatment of Alzheimer’s disease is convincing”’ one by Birks, and the ‘Commentary’ one by Ashby.


Molnar, F. J., Man-Son-Hing, M., Hutton, B., & Fergusson, D. (2009). Have last-observation-carried-forward analyses caused us to favour more toxic dementia therapies over less toxic alternatives? A systematic review. *Open Medicine, 3*(2), 31-50 (EJournal)


University Policies

ACADEMIC INTEGRITY:
Academic dishonesty, which includes plagiarism and cheating, is an extremely serious academic offence and carries penalties varying from a 0 grade on an assignment to expulsion from the University. Definitions, penalties, and procedures for dealing with plagiarism and cheating are set out in Trent University’s Academic Integrity Policy. You have a responsibility to educate yourself – unfamiliarity with the policy is not an excuse. You are strongly encouraged to visit Trent’s Academic Integrity website to learn more – www.trentu.ca/academicintegrity.

ACCESS TO INSTRUCTION:
It is Trent University’s intent to create an inclusive learning environment. If a student has a disability and/or health consideration and feels that he/she may need accommodations to succeed in this course, the student should contact the Accessibility Services Office as soon as possible – in Peterborough (accessibilityservices@trentu.ca, BH Suite 132, 748-1281) or in Oshawa (Student Accessibility Services Office Room 111, corinphillips@trentu.ca, (905) 435-5102, ext. 5024).

Departmental Policy on Tests, Exams, and Assignments

A. MIDTERMS & FINAL EXAMINATIONS
Midterm examinations for half courses within the Psychology Department are scheduled by the instructor of the course. Midterm examinations for full courses and final examination for all courses are scheduled by the Registrar’s Office. Students are strongly urged NOT to make any commitments (i.e., vacation, job related, or other travel plans) during either the term as a whole or the final examination period. Students are required to be available for all examinations during the periods for which they are scheduled (as published in course syllabi).

B. DEFERRAL OF MIDTERM / FINAL EXAMINATIONS and/or TERM WORK
Extensions of deadlines for completion of assignments or writing of midterms/final examinations may be granted to students on the basis of illness, accident, or other extreme and legitimate circumstances beyond their control. Consideration for deferrals will not normally be granted on the basis of vacation/travel plans or job-related obligations.

C. SUPPORTING DOCUMENTATION
Students should expect that supporting documentation will be required and must be submitted before a deferral is approved. For illness or accident, supporting documentation will take the form of: (1) the Trent University Medical Certificate from Health Services: (http://www.trentu.ca/healthservices/medical.html), or (2) a certificate or letter from the attending physician clearly indicating the start and end dates of the illness and the student’s inability to write an examination, complete assignments, and/or attend classes, as relevant to the particular request. For other circumstances, students should consult the individual Psychology faculty member about acceptable forms of documentation.

Notes

1. Academic Integrity:
   For the purpose of interpreting and applying the University policy on academic dishonesty, the Department of Psychology has adopted the following:
   When a student submits a piece of written work in fulfillment of an assignment, he/she implicitly acknowledges the following: a) that she/he is the sole author of the work; b) that the wording and organization of the work, apart from acknowledged quotations, is her/his own; and c) that she/he has not and will not submit this work, either as a whole or in part, to satisfy another course requirement. These basic assumptions will be reasonably interpreted. They do not preclude collaboration between students upon a single project, by prior arrangement with the instructor, for shared academic credit (either for written or oral presentation).

   For an elaboration of the Department’s policy on, and for specific examples of, plagiarism, students should consult p. 178 in the APA (2010) and the sections on academic honesty (pp. 6-8), and appropriate citing and referencing (pp. 135-137, 169) in Mitchell et al. (2010) on reserve in the library. Students who have doubts about what might be considered academic dishonesty are urged to consult the instructor of the course. Ignorance of the University or Department policy does not excuse academic dishonesty. Submissions that fail to meet one or more of these considerations will be subject to procedures laid down in the policy on academic dishonesty as stated in the University calendar.

2. It is the policy of the Department NOT to accept faxed assignments.

3. The same assignment cannot be submitted in more than one course without the prior written permission of all instructors concerned. The written approval must be attached to the work when it is submitted.


5. Please see the Trent University academic calendar for University Diary dates, Academic Information and Regulations, and University and departmental degree requirements.

6. Last date to withdraw without academic penalty November 10, 2015 for Fall half courses.