### Faculty of Health

#### **Department of Psychology**

## PSYC 3495 3.0 Section A: NEUROSCIENCE OF AGING AND COGNITIVE HEALTH Thursday/2:30-5:30/CLH-E

Fall/2019

#### **Instructor and T.A. Information**

Instructor: Gary R. Turner Office: Rm 2040, Sherman Office Hours: By appointment Email: grturner@yorku.ca

T.A.	Amir Zarie		
Email	zarieamir@gmail.com		
Office	TBD		
Office Hours	By appointment		

#### Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2240 3.00 (Biological Basis of Behaviour)
- Completed at least 54 earned credits

#### **Course Credit Exclusions**

Please refer to York Courses Website for a listing of any course credit exclusions.

**Course website: Moodle** 

#### **Course Description**

This course investigates the neural basis of cognitive changes across the adult lifespan. Students will learn how the brain is altered in structure and function as people age and how these changes impact cognition. The course will examine the border between normal and abnormal aging and how neuroscience research is informing strategies to sustain cognitive health into older adulthood.

#### **Program Learning Outcomes**

Upon completion of this course, students should be able to:

- 1. Demonstrate in-depth knowledge in the neuroscience of aging and cognitive health.
- 2. Articulate trends in the neuroscience of aging and cognitive health.
- 3. Express knowledge of the neuroscience of aging and cognitive health in written form
- 4. Describe and explain limits to generalizability of research findings on the neuroscience of aging and cognitive health.

5. Demonstrate ability to relate information on the neuroscience of aging and cognitive health to own and others' life experiences.

#### **Required Texts**

- 1. Erber, Joan T. (2013). Aging and Older Adulthood, 3rd edition. Wiley Blackwell Publishing. United Kingdom
- 2. Snowdon, D. (2002). Aging with Grace. Bantum Books. New York, USA.

#### **Course Requirements and Assessment:**

Assessments	Date of Evaluation	Weighting
Mid-term Test	October 24, 2019	35%
Discussion/Book Club Questions	Due for each online class	5%
Term Paper/'Elevator Pitch'	November 28, 2019	30%
Final Exam	In exam period	30%
Total	•	100%

#### **Grading as per Senate Policy**

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+=9, A=8, B+=7, C+=5, etc.). Assignments and tests\* will bear either a letter grade designation or a corresponding number grade (e.g. A+=90 to 100, A=80 to 89, B+=75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar - Grading Scheme for 2019-20

#### **Missed Tests/Midterm Exams/Late Assignment:**

For any missed tests, midterm exam or late assignments, students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office.

HH PSYC: Missed Tests/Exams Form. Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed tests, midterm exam or late assignments.

In addition, to the online form, students documented reason for a missed tests, midterm exam or late assignments such as illness, compassionate grounds, etc., MUST submit official documentation (e.g. Attending Physician Statement)

#### Add/Drop Deadlines

For a list of all important dates please refer to: Fall/Winter 2019-20 - Important Dates

	FALL	YEAR	WINTER
	<b>(F)</b>	<b>(Y)</b>	(W)
Last date to add a course without permission of	Sept. 17	Sept. 17	Jan. 19
instructor (also see Financial Deadlines)			
Last date to add a course with permission of	Oct. 1	Oct. 22	Feb. 3
instructor (also see Financial Deadlines)			
Drop deadline: Last date to drop a course without	Nov. 8	Feb. 3	March 13
receiving a grade (also see Financial Deadlines)			
Course Withdrawal Period (withdraw from a	Nov. 9 -	Feb. 4 -	March 14 -
course and receive a grade of "W" on transcript -	Dec. 3	Apr. 5	Apr. 5
see note below)			

\*Note: You may withdraw from a course using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as "W". The withdrawal will not affect your grade point average or count towards the credits required for your degree.

#### **Academic Integrity for Students**

York University takes academic integrity very seriously; please familiarize yourself with <u>Information about the Senate Policy on Academic Honesty</u>.

It is recommended that you review Academic Integrity information <u>SPARK Academic Integrity modules</u>. These modules explain principles of academic honesty.

#### **Test Banks**

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as "Cheating in an attempt to gain an improper advantage in an academic evaluation" (article 2.1.1 from the Senate Policy) and/or "encouraging, enabling or causing others" (article 2.1.10 from the Senate Policy) to cheat.

#### **Electronic Devices During a Test/Examination**

Electronic mobile devices of any kind are not allowed during a test or examination. Students are required to turn off and secure any electronic mobile device in their bag which is to be placed under the chair while a test/exam is in progress. Any student observed with an electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of Academic Honesty.

#### Academic Accommodation for Students with Disabilities

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The <u>York</u>

<u>University Accessibility Hub</u> is your online stop for accessibility on campus. The <u>Accessibility Hub</u> provides tools, assistance and resources. Policy Statement.

**Policy**: York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

For Further Information please refer to: <u>York university academic accommodation for students with disabilities policy.</u>

#### **Course Materials Copyright Information**

These course materials are designed for use as part of the PSYC 3495.03 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. Intellectual Property Rights Statement.

[ SEE SYLLABUS BELOW!]

# COURSE OUTLINE \*\*\* PLEASE ALWAYS CHECK MOODLE FOR UPDATES \*\*\*

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DATE	TOPIC	READINGS		
September 05, 2019	INTRODUCTION TO AGING, NEUROSCIENCE & COGNITIVE HEALTH	<u>Readings:</u> - Chapter 1: pp. 3-13; 23-32		
September 12, 2019	VIDEO / ARTICLE	http://www.cbc.ca/news/health/lumosity -ftc-1.3390544		
September 19, 2019	NEUROANATOMY, AGING RESEARCH METHODS & THEORY	Readings: - Chapter 2: pp. 33-60 - Chapter 3: pp. 61-82 (top); 86-92		
September 26, 2019	SENSATION, PERCEPTION & ATTENTION	Readings: - Chapter 4: pp. 100-131		
September 03, 2019	MEMORY	Readings: - Chapter 5: pp. 132-164		
October 10, 2019	HIGHER COGNITON & DISEASES OF AGING	Readings: - Chapter 7: pp. 199-233 - Chapter 11: pp. 329-360		
October 17, 2019	READING WEEK	NO CLASS		
October 24, 2019	TERM TEST	NO READINGS		
October 31, 2019	COGNITIVE INTERVENTIONS: EVALUATING THE EVIDENCE	Readings: - To be posted on Moodle		
NOV 07, 2019	ONLINE LECTURE  BOOK CLUB &  THOUGHT QUESTIONS	Readings: - Aging Gracefully - Reading (Check Moodle)		

DATE	TOPIC	READINGS
November 14, 2019	ONLINE LECTURE BOOK CLUB & THOUGHT QUESTIONS	Readings: - Aging Gracefully - Discussion reading (Check Moodle)
November 21, 2019	ONLINE LECTURE BOOK CLUB & THOUGHT QUESTIONS	Readings: - Aging Gracefully - Discussion reading (Check Moodle)
November 28, 2019 (TERM PAPERS DUE: BEGINNING OF CLASS)	INTERVENTIONS OVERVIEW & AGING GRACEFULLY: BOOK CLUB & COURSE REVIEW	No Readings