

Course Details

Instructor

Dr. Ayesha Khan
Office Hours & Location: See details on *Avenue to Learn*
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Please include the course code (Psych 2GG3) in the subject of all E-mails.

Course Description

This course will survey principles of learning theories and habit formation along with measurement and assessment of behaviour through theoretical, experimental, and real-world applications in humans and animals.

Students will first understand behaviour from a historical perspective by exploring how philosophers such as Aristotle and Plato explained learning in human and non-human organisms and how earlier constructs have shaped later approaches and ethical practices in human and/or animal research and husbandry. Next, a deeper understanding of theoretical concepts and experimental work will be explored from key figures in learning theory, not limited to but including E.L. Thorndike (often called the founder of learning theory), B.F. Skinner and J. B. Watson (Operant Conditioning), I. P. Pavlov (Classical Conditioning), and A. Bandura (Social learning theory). Students will also explore psychological measurement and assessment of behaviour in humans and animals as these apply in a real world setting including the effects of punishment and reward, assessment of stress in laboratory and zoo animals, and understanding of methodological concepts in psychological testing such as reliability and validity.

By the end of this course, students will be able to:

- Explain the precursors of modern learning theories.
- Understand the role of ethics in human and animal research.
- Provide descriptions of theory and research related to learning principles from leading thinkers including Thorndike, Skinner, Watson, Pavlov, and Bandura (beyond understanding from their introductory Psychology courses).
- Further understand how classical conditioning, operant conditioning, and social learning theory could be used in real-world settings (e.g., parenting, animal training, marketing and advertisement).
- Get an introduction to methodological and technical principles of behavioural and psychological testing (i.e., observational methods, ethograms, test scores and norms, reliability, validity and some practice in test construction).
- Understand how habits are created, maintained, and how they can be changed.

Tutorials: Students will read a popular press book by Pulitzer prize-winning author Charles Duhigg, investigative reporter from The New York Times, “The Power of Habit: Why We Do What We Do in Life and Business.” This book contains information from research in psychology and neuroscience on habit formation and behaviour change. Tutorials will require student teams (roughly 3-4 persons per team) to develop a 15-20 minute interactive workshop (also known as a *Learning Lab*) with the purpose of engaging others in an experience that is directly related to book readings for that week. A major aim of the Learning Labs is to deepen understanding of book concepts through an experiential exercise. Each group will be required to meet with their Teaching Assistant (TA) one week prior to delivery of the Learning Lab with a final (written and timed) plan that must also contain a title for the lab.

Each tutorial will begin with a Learning Lab followed by mini-exercises called *Learning Plugs*. Learning Plugs will allow for students to engage in an interactive activity that will help consolidate information presented in the book and/or lecture.

The purpose of both Learning Labs and Plugs is to help students think about the habit book in a meaningful manner so that LEARNING can occur by DOING. This is a student-centered experiential learning opportunity where students will get the chance to create a valuable experience for others by partnering with TAs to create tutorial experiences that will allow for them to be innovative, creative, and assume responsibility for their learning along with the learning of others.

iClicker quizzes: Students must purchase an iClicker to complete weekly in-class quizzes. These quizzes will be held at the start of class.

Midterm & Final Exam: There will be one midterm and one final exam. The final exam will be cumulative in nature and will cover all course content.

Both lecture and textbook readings will be tested equally on both exams.

Lectures (three hours); one term

Prerequisite(s): One of ISCI 1A24, PSYCH 1F03, 1N03, 1X03 and registration in Level II or above; or registration in Level II or above of an Arts & Science or B.H.Sc. (Honours) program

Required Materials

Textbooks by other authors OR older editions of the Lefrançois text are not acceptable for this course.

1. Theories of Human Learning: What the Professor Said
6th Edition

Author(s): Lefrançois, G.R.
Publisher: Cengage Learning
Copyright year: © 2012 Pages: 464

eText: ISBN-13 9781133323853 | ISBN-10 1133323855
Print: ISBN-10 1111829748 | ISBN-13 9781111829742

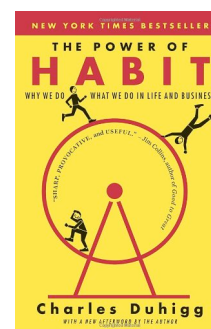
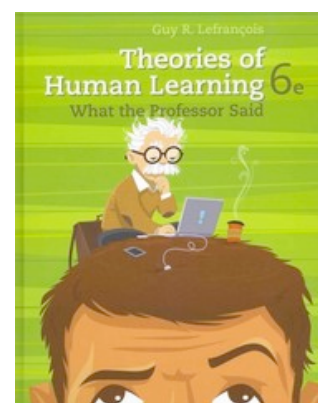
Information about alternative forms of this text can be found here:
<http://www.nelsonbrain.com/shop/ISBN/9781111829742?cid=APL1>

2. iClickers can be purchased at the Campus Store and must be registered online with your **name** and **MacID (not Student No.)**.

<http://www.bookstore.mcmaster.ca/textbooks/iclicker-faq.html>

3. The Power of Habit: Why We Do What We Do in Life and Business

Author: Duhigg, C
Publisher: Random House Publishing Group
Copyright year: © 2012 Pages: 416
Print: ISBN-13 9780812981605



Evaluation

Final course grade will be based on:

1. Midterm (20%)
2. Learning Lab (15%)
3. Tutorial Participation (15%)
4. iClicker Quizzes (Best 8 out of 9, 10%)
5. Cumulative Final exam (40%) to be scheduled by the Office of the Registrar

Information about each course component will be posted on *Avenue to Learn*.

It is not possible to change the weight associated with each course component.

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| <p>Midterm, Quizzes, & Final Exam</p> | <p>iClickers will be used for all quizzes. The purpose of these quizzes is to encourage reading of text material. Each quiz will contain questions from chapter readings for that week alone. If there are no chapter readings assigned for that week, please refer to <i>Avenue to Learn</i> for other readings.</p> <p>Every student needs to purchase an iClicker and should bring it to every quiz date. iClickers can be purchased at the Campus Store and must be registered online with your name and MacID (not Student No.) in order to receive participation credit for your iClicker responses, visit http://www.bookstore.mcmaster.ca/textbooks/iclicker-faq.html</p> <p>Information presented via guest speakers, video or audio format will be testable on the midterm and final exam. Due to copyright issues, it may not be possible to post videos/audio recordings presented in class on <i>Avenue to Learn</i>. If you miss a class, please ask a fellow classmate for lecture notes.</p> <p>The midterm exam will be two hours in duration covering questions from all chapters, lecture notes, and audio/video/guest speaker presentations.</p> <p>The final exam will be 2.5 hours in duration and cumulative, covering questions from all chapters, lecture notes, guest speakers, and audio/video presentations from throughout the semester.</p> |
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| <p>Web Postings</p> | <p>In this course we will be using <i>Avenue to Learn (Avenue)</i>. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation <i>may</i> become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.</p> |
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Course Policies

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| <p>Missed Tests & Quizzes</p> | <p>Please read this section carefully: No make-up quizzes are offered for this course. If you miss a quiz you will receive a mark of zero for that quiz. We simply don't have the man/woman-power to create permutations associated with final grade calculations. To keep it simple, you have the option to miss ONE quiz without penalty (regardless of MSAF submission).</p> <p>If you miss the midterm you MUST write a make-up test.</p> |
| <p>McMaster Student Absence Form (MSAF)</p> | <p>If you are absent from the university for a minor medical reason, lasting fewer than 5 days, you may report your absence, once per term, without documentation, using the MSAF (http://www.mcmaster.ca/msaf/). Absences for a longer duration or for other reasons must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted.</p> <p>When using the MSAF, report your absence to msaf.2gg3@gmail.com</p> |
| <p>Other Academic Matters</p> | <p>If you require a specific grade in this course, please make sure that you create a schedule for yourself that will allow for you to: (1) complete all readings and course requirements, (2) attend all class meetings, (3) create a realistic study schedule, and (4) visit the Instructor during office hours for additional help. If you are struggling with course material, ask for help <u>early</u>!</p> |
| <p>Bonus Marks</p> | <p>Your final course grade will be calculated based on the course components listed on the second page. It is not possible to add bonus marks.</p> |

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| Learning Lab Plan | <p>All written work will be marked on creativity, grammar, clarity of writing, and organization. Your Learning Lab Plan should be no less than two pages double-spaced and a maximum of five pages double-spaced (depending on the complexity of your workshop). It should contain the following major components:</p> <ol style="list-style-type: none"> 1. Title of the Learning Lab 2. Two/three Learning Goals/Objectives: What do you hope for participants to gain from this lab? Each learning objective must clearly connect with chapter content. Be sure to explicitly state what part(s) of the chapter will be the focus of your workshop and how each learning objective ties with your chosen content and workshop activity. 3. Knowledge Gained: How will you assess if participants are meeting your learning objectives? 4. Workshop details with specific reference to the amount of time that will be spent on each aspect of the workshop. <p>You may choose any style for referencing depending on your familiarity. It is preferred that you select a citation style typically used in the sciences, social sciences, or medical sciences. Once you have selected a citation style, please continue to use that specific style throughout the term.</p> <p>Each group must meet with their TA, one week prior to their learning lab. During this meeting, the group will present a final draft of the lab plan. If the plan is not complete, 25% will be deducted from the learning lab grade. The final plan will be submitted only after feedback from the TA.</p> |
| Turnitin.com | <p>In this course we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to: http://www.mcmaster.ca/academicintegrity</p> <p>Students are encouraged to visit the Centre for Student Development to improve their writing skills (MUSC B107 at x:24711). For information about the Writing Clinic and other services, visit the Centre's website: http://studentsuccess.mcmaster.ca/academic-skills/writing-support-services.html</p> |
| Penalties | <p>All learning lab plans must be submitted via Dropbox in Microsoft® WORD, on the date of each workshop (before 9AM). Do not submit lab plans by email and do not slide them under the instructor's door.</p> <p>Late assignments will be penalized 5% a day (weekends will count as one day). This 5% penalty also applies to the use of additional pages to complete the lesson plan.</p> |
| Plagiarism | <p>Honesty and fairness are considered fundamental to the university's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself.</p> <p>When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with and how severe the consequences can be if it is determined that cheating did occur.</p> <p>You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.</p> |

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at <http://www.mcmaster.ca/academicintegrity>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in-group work.
3. Copying or using unauthorized aids in tests and examinations.

McMaster University
Grading Scale

| Grade | Equivalent Grade Point | Equivalent Percentages |
|-------|------------------------|------------------------|
| A+ | 12 | 90-100 |
| A | 11 | 85-89 |
| A- | 10 | 80-84 |
| B+ | 9 | 77-79 |
| B | 8 | 73-76 |
| B- | 7 | 70-72 |
| C+ | 6 | 67-69 |
| C | 5 | 63-66 |
| C- | 4 | 60-62 |
| D+ | 3 | 57-59 |
| D | 2 | 53-56 |
| D- | 1 | 50-52 |
| F | 0 | 0-49 |

Document Submission

Any claims of documents submitted to locations/persons apart from those indicated in this course syllabus will NOT be accepted.

Course News

You are also responsible for checking *Avenue* on a regular basis (on the morning of each class meeting at minimum) to ensure that you are up-to-date on important announcements related to this course.

Accessibility Services

McMaster University Student Centre (MUSC) Basement, Room B107, or telephone 905-525-9140 at x:28652
<http://sas.mcmaster.ca/>

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| Changes to the Course Outline | <p>At certain points in the course it may make good sense to modify the schedule outlined.</p> <p>The instructor reserves the right to modify elements of the course and will notify students accordingly, both in class and on <i>Avenue</i>.</p> <p>Posted changes take precedence over this course outline.</p> <p>The University may change the dates and deadlines for any or all courses in extreme circumstances.</p> <p>If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.</p> |
| Lecture Recordings | <p>Students may make audio recordings of the lectures, for personal use only and not to be posted online, emailed, distributed or otherwise shared.</p> <p>Video recordings are prohibited.</p> <p>Students should inform the instructor in advance if they wish to make an audio recording.</p> |

Course Schedule

| Date | Topic | Associated Readings |
|---------------------------|---|---------------------|
| January 10 th | Human Learning | Chapter 1 |
| January 17 th | Early Behaviorism: Pavlov, Watson, and Guthrie | Chapter 2 |
| January 24 th | The Effects of Behaviour: Thorndike and Hull | Chapter 3 |
| January 31 st | Operant Conditioning: Skinner's Radical Behaviourism | Chapter 4 |
| February 7 th | Evolutionary Psychology, Learning, Biology, and the Brain | Chapter 5 |
| February 14 th | Psychopharmacology | Lecture Notes Only |
| February 21 st | Reading Week (No Class) | |
| February 28 th | Midterm 7:00 – 9:00PM (Chapters 1 – 5 inclusive) | |
| March 7 th | Transition to Modern Cognitivism: Hebb, Tolman, and the Gestaltists | Chapter 6 |
| March 14 th | Three Cognitive Theories: Bruner, Piaget, Vygotsky | Chapter 7 |
| March 21 st | Motivation | Chapter 10 |
| March 28 th | (Psychological) Assessment | Lecture Notes Only |
| April 4 th | Social Learning | Chapter 11 |

| iClicker Quizzes | Dates If you submit a MSAF, we do not have the capacity to create make-up quizzes. Best 8 quizzes will count out of 9 for the final course grade. |
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| Practice Quiz (Bring iClicker to class) **Please make sure to register with your name and MacID | January 17 th |
| Quiz 1, 2, & 3 | January 24 th , January 31 st , February 7 th |
| Quiz 4, 5, & 6 | February 14 th , March 7 th , March 14 th |
| Quiz 7 | March 21 st |
| Quiz 8, 9 | March 28 th , April 4 th |

| Tutorials & Learning Labs | Due Dates *All Learning Lab Plans will be due the morning of each lab (before 9AM). Please submit to the DROPBOX folder created for your tutorial section. |
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| No Tutorial | Week of January 9th |
| Tutorials Begin Meet & Greet With TAs and tutorial members Learning Lab Selection The Habit Loop: How Habits Work Read Chapter 1 from Duhigg to prepare for tutorial | Week of January 16th |
| TA Advising During Tutorial | Week of January 23rd |
| The Craving Brain: How to Create New Habits <i>Learning Labs & Plugs</i> begin Read Chapter 2 to prepare for tutorial | Week of January 30th |
| The Golden Rule of Habit Change: Why Transformations Occur Read Chapter 3 to prepare for tutorial | Week of February 6th |
| Keystone Habits: Which Habits Matter Most Read Chapter 4 to prepare for tutorial | Week of February 13th |
| TA Advising During Tutorial | Week of February 27th |
| Starbucks and the Habit of Success: When Willpower Becomes Automatic Read Chapter 5 to prepare for tutorial | Week of March 6th |
| The Power of a Crisis: How Leaders Create Habits Through Accidents and Design Read Chapter 6 to prepare for tutorial | Week of March 13th |
| How Target Knows What You Want Before You Do: When Companies Predict (and Manipulate) Habits Saddle Read Chapter 7 to prepare for tutorial | Week of March 20th |
| The Neurology of Free Will: Are We Responsible for Our Habits? Read Chapter 9 to prepare for tutorial | Week of March 27th |