INSTRUCTOR
Dr. Ayesha Khan  Room: PC 107  Email: khan_pnb@mcmaster.ca
Include the course code (Psych 2GG3) in the subject of all E-mails

TEACHING ASSISTANTS
Contact information is available on Avenue to Learn (Avenue). Please do not send messages via Avenue mail as this inbox is not checked on a regular basis. Students are highly encouraged to use the discussion forums on Avenue to ask questions about course policies and about the course content.

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

Students first understand Learning Theory 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 data are studied by understanding the works of key figures, 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 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 through the understanding of methodological concepts in psychological testing such as reliability and validity.

COURSE OBJECTIVES
By the end of this course, students should be able to:
1. explain the precursors of modern learning theories;
2. understand the role of ethics in human and animal research;
3. provide descriptions of theory and research related to learning principles from leading thinkers in the field including Thorndike, Skinner, Watson, and Pavlov;
4. add to their knowledge about how classical conditioning, operant conditioning, and social learning theory are used in real-world settings (e.g., parenting, animal training, marketing and advertisement);
5. explain the 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); and,
6. describe how habits are created, maintained, and how they might be changed.
**TUTORIALS**

Students 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.” The book contains information from research in psychology and neuroscience on habit formation and behaviour change. Tutorials require student teams (roughly 4 persons per team) to develop a 15-to-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 each Learning Lab is to deepen understanding of book concepts through an experiential exercise. Each team is 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.

The purpose of each **Learning Lab** is to help students think about the habit book in a meaningful manner so that **LEARNING** can occur by **DOING**. Each lab is a student-centered experiential learning opportunity. By partnering with their TAs, students are provided with the opportunity to plan and offer a valuable exercise for their peers to showcase their ingenuity and to display their knowledge of the habit book in a unique and creative manner.

**COURSE FORMAT**

Two-hour in-class lecture: Wednesdays, 7:00 – 9:00 PM in TSH 120

One 50-minute tutorial: Time and location available on MOSAIC

**REQUIRED TEXTS & MATERIALS**

1. Theories of Human Learning
   7th Edition
   Author(s): Lefrançois, G.R.
   Publisher: Cambridge University Press
   Copyright year: © 2020


   Information about alternative forms of this text can be found online:
   [https://www.cambridge.org/ca/academic](https://www.cambridge.org/ca/academic)

   A copy is also available in Thode Library for short-term loan.

2. 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
<table>
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<tr>
<th>WEEK</th>
<th>TEXTBOOK READINGS</th>
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<td>JANUARY</td>
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<tr>
<td>1 – January 8th</td>
<td>Introduction to the Course Active Learning 101</td>
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<td>2 – January 15th</td>
<td>Learning How to Learn Human Learning</td>
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<td>3 – January 22nd</td>
<td>Early Behaviorism: Pavlov, Watson, and Guthrie</td>
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<td>4 – January 29th</td>
<td>The Growth Mindset The Effects of Behaviour: Thorndike and Hull</td>
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<td>FEBRUARY</td>
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<tr>
<td>5 – February 5th</td>
<td>Operant Conditioning: Skinner’s Radical Behaviourism</td>
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<td>6 – February 12th</td>
<td>Evolutionary Psychology, Learning, Biology, and the Brain</td>
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<tr>
<td>MARCH</td>
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<tr>
<td>7 – February 26th</td>
<td>Midterm [2 hrs] on content until the end of class on Feb 12th</td>
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| 8 – March 4th | **Make-Up Midterm [2 hrs]** on content until the end of class on Feb 12th  
Students who do not write the midterm on the original date MUST submit a McMaster Student Absence Form on February 26th and should be prepared to write the make-up test on March 4th. 
If you miss the make-up test, your case will be forward to the Associate Dean’s Office. 
We cannot guarantee that the format of the make-up test will be the same as the original test.  
Only those students who missed the midterm on FEB 26th attend class today.  
All other students are given relief from lecture tonight! |
| 9 – March 11th | Psychopharmacology                                             |
| 10 – March 18th | Transition to Modern Cognitivism: Hebb, Tolman, and the Gestalts       |
| 11 – March 25th | Three Cognitive Theories: Bruner, Piaget, Vygotsky          |
| APRIL      |                                                        |
| 12 – April 1st | Motivation                                                   |

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ONLINE CONTENT: This course uses Avenue to post the course outline, assignments, and other notices. Go to http://avenue.mcmaster.ca to find out how to log-on to the course’s platform.

Students should be aware when they access the electronic components of this course, private information such as first and last names, usernames for the McMaster e-mail accounts, and program affiliation may 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.

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

EVALUATION

Midterm & the Final Exam

- The format of the midterm and the final exam is multiple-choice questions and short-answer questions.
- Make-up tests might be in a different format (e.g., all short answer or a combination of short-answer and essay questions).
- Each test includes questions from content presented in the lecture, the lecture notes, guest speakers, supplementary links posted under the lecture notes section on Avenue, and the Lefrançois textbook and the Duhigg book.
- Information presented via guest speakers, along with all audio or video clips shown in class, is testable on the term tests and the final exam. It may not be possible to post videos/audio recordings presented in class on Avenue. It is the responsibility of the student to know about all content presented and discussed in class.
- The final exam is 2.5 hours in duration and it is cumulative, covering questions from all Lefrançois chapters (but only the Duhigg chapters after the midterm), lecture notes, guest speakers, and audio/video presentations from throughout the semester.
- A note about cumulative final exams: Although this assessment may be unpopular amongst students, there is evidence to suggest that this exam type promotes longer lasting learning. Read “Short- and Long-term Effects of Cumulative Finals on Student Learning” via https://doi.org/10.1177/0098628313487458

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<thead>
<tr>
<th>ASSESSMENT</th>
<th>PERCENTAGE</th>
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<tr>
<td>Midterm and Final Exam</td>
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<tr>
<td>Midterm</td>
<td>22.5% [Held during regular lecture time]</td>
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<tr>
<td>Cumulative Final Exam</td>
<td>42.5% [Scheduled by the Registrar]</td>
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<td>Tutorials</td>
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<tr>
<td>Group Code of Ethics Document</td>
<td>Pass/Fail</td>
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<td></td>
<td>[Failure = 15% deduction from Team Learning Lab Plan and Activity]</td>
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<tr>
<td>Learning Lab Plan Document</td>
<td>20% Peer evaluation will constitute 20% of the mark allocated to the Learning Lab Plan.</td>
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<tr>
<td>Learning Lab Activity</td>
<td>15%</td>
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POLICY ON EXTENSIONS, LATE PENALTIES, AND ACCOMMODATIONS FOR MISSED WORK

McMaster Student Absence Form (MSAF). If you are absent from the university for a minor medical reason, lasting up to 3 calendar days, you may report your absence, once per term, without documentation, using the MSAF system. Absences for a longer duration or for other reasons must be reported to your Faculty office, with documentation, and relief from term work may not necessarily be granted. Go to https://www.mcmaster.ca/msaf/ to read the MSAF policy.

There is a 5% penalty daily (including weekends) for the submission of assignments after a deadline.

Tutorial Attendance is Mandatory

• We will take attendance during tutorial.
• If you miss a tutorial, please use the MSAF to document your absence.
• For each missed tutorial, there will be a 1% penalty from the individual learning lab grade.

Missed Midterm

• If you miss a midterm, please submit the MSAF to khan_pnb@mcmaster.ca
• You are expected to complete a make-up test on the designated date. Failure to do so will result in a grade of zero for the test.
• Please do not request for a change in the weighting of the midterm to the final exam.
• The make-up test may be of a different format from the original test e.g. all short answer.

Missed Learning Lab PLAN Meeting with Teaching Assistant (TA)

• If you miss the meeting on the day that you team plans to meet with your TA, please use the MSAF to document your absence. Please submit the MSAF to khan_pnb@mcmaster.ca
• Failure to submit the MSAF will result in a 25% deduction in the individual learning lab plan mark.
• Despite the submission of the MSAF, you will be required to meet with your TA on another date.
• If the MSAF is submitted and an alternate date is not arranged to meet with the TA, there will be a 25% deduction from your individual learning lab plan mark. It is the responsibility of the student to organize a time to meet with their TA.

Missed Learning Lab

• If you are not able to attend tutorial on the day of your learning lab, please use the MSAF to document your absence. Please submit the MSAF to khan_pnb@mcmaster.ca
• Failure to submit the MSAF will result in a 25% deduction in your individual learning lab mark.
• Despite the submission of the MSAF, you will be required to meet with your TA on another date to answer questions about the team’s learning lab. If the MSAF is submitted and an alternate date is not arranged to meet with the TA, there will be a 25% deduction from your individual learning lab mark. It is the responsibility of the student to organize a time to meet with their TA.

Peer Evaluation Form

• Since we are a large enrollment class with many students in one tutorial, in order to manage our workload, peer evaluation forms are ONLY accepted in hard-copy format and on the day of each
team’s Learning Lab. If you wish for your evaluation to be counted in the assessment of your team member’s work, then please be sure to bring the form with you on the day of your lab.

**WEEKLY TUTORIAL SCHEDULE**

The weekly meeting structure of this course has been organized with great thought and purpose. Typical courses that contain tutorials have *three* lecture meetings with an additional tutorial time slot. Our course has *two* lecture meetings and *one* tutorial meeting. Please use the additional “flexible” hour to complete course deliverables.

FYI: Did you know that the expectation at most Canadian institutions is that for every one hour of class or tutorial time, students should spend two external hours on related work such as readings, completing assignments, studying lecture notes, etc.?


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<th>WEEK</th>
<th>DESCRIPTION</th>
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| January 13th       | **Tutorials Begin**  
Meet & Greet With TAs  
Read Chapter 1 from Duhigg to prepare for tutorial  
Learning Lab Topic Selection & Group Organization |
| January 20th       | Teams Work on Group Code of Ethics Document  
Teams Work on the Development of Learning Labs  
**Teams Submit Group Code of Ethics Document by 5PM on Jan 25th to DropBox on Avenue** |
| January 27th       | Teams Work on the Development of Learning Labs  
All students attend tutorial. However, TAs meet with teams presenting during week of Feb 3rd, in tutorial  
**All teams finalize a time and location to meet with TAs** |
| February 3rd       | The Craving Brain: How to Create New Habits  
Read Chapter 2 to prepare for tutorial  
**Learning Labs Begin this Week** |
| February 10th      | The Golden Rule of Habit Change: Why Transformations Occur  
Read Chapter 3 to prepare for tutorial |
| February 24th      | TUTORIAL ONLY for THOSE STUDENTS that will deliver Learning Labs Next Week  
TAs meet with teams presenting in the week of March 2nd, during tutorial |
| March 2nd          | Keystone Habits: Which Habits Matter Most  
Read Chapter 4 to prepare for tutorial |
| March 9th          | Starbucks and the Habit of Success: When Willpower Becomes Automatic  
Read Chapter 5 to prepare for tutorial |
| March 16th         | The Power of a Crisis: How Leaders Create Habits Through Accidents and Design  
Read Chapter 6 to prepare for tutorial |
| March 23rd         | How Target Knows What You Want Before You Do: When Companies Predict (and Manipulate) Habits  
Read Chapter 7 to prepare for tutorial |
| March 30th         | The Neurology of Free Will: Are We Responsible for Our Habits?  
Read **Chapter 9** to prepare for tutorial |
TEAM Meeting with TA one Week Before LEARNING LAB

- Tutorial TAs will organize a time to meet with each team roughly one week prior to their Learning Lab, with some meetings taking place during the tutorial hour.
- During the meeting, the team will present a COMPLETE version of their learning lab so that the TA can offer feedback.
- The FINAL version of the learning lab plan will be submitted in the form of an electronic copy on the day of the learning lab. One team member will upload the plan to the relevant drop box on Avenue on the day of the lab.
- It is expected that all team members will attend the meeting. If a team member is not available to attend the meeting, there will be a 25% deduction in the individual learning lab plan mark. It is expected that the MSAF is to be submitted to account for the absence of a team member; that student is still expected to meet with the TA at another time. It is the responsibility of the student to contact the TA to organize a time to meet.

On The Day of the LEARNING LAB

- Submit an electronic copy of your learning lab plan to Avenue before the start of the tutorial.
- Bring a hard-copy of the peer evaluation form so that it may be submitted directly to your TA.

LEARNING LAB PLAN

The purpose of a Learning Lab is to help students think about the habit book in a meaningful manner so that LEARNING can occur by DOING. Student teams will create a 15-20 minute lab for their tutorial section. Each lab is delivered in the form of an activity that will invite students to participate in an exercise that connects to some element of a selected chapter in the Duhigg book.

- Do not design a PowerPoint presentation with the aim to deliver a mini-lecture during tutorial (boring!).
- Do keep in mind that students are expected to read each chapter prior to attending the tutorial. Given that the students have ALREADY read the chapter, what type of an activity, reflection exercise, or game might you create to enhance, review, or add to their understanding?
- Aim to design activities that are meaningful to the daily lives of students. Similar to the Duhigg book, what key take-away messages might your lab provide so that students can implement them in their daily lives?

The Learning Lab Plan helps your team organize the ENTIRE activity on ‘paper’ All written work is marked on creativity, grammar, relevance to the Duhigg chapter, clarity of writing, organization, and overall level of preparedness and following instructions as presented in this document.

Your Learning Lab Plan should be no less than three pages double-spaced and a maximum of five pages double-spaced (depending on the complexity of the lab). It is not expected for students to use external references to create the learning lab. However, if an idea is taken from an external source then it must be referenced appropriately. If no other references are used apart from the Duhigg text, then please only provide one reference and conform to the APA (American Psychological Association) style to cite the source. For more information, please refer to the Online Writing Lab hosted by Purdue University (Search online using the keywords “APA Purdue”).
The Learning Lab plan should contain SIX major components with individual headings. Where appropriate, be sure to create interesting and engaging headings so that the document captivates the interest of your reader (i.e., the person who will mark your Learning Lab!)

The title and reference pages are outside of the page limit requirements. Tables, diagrams, additional materials may be included in an appendix that is also outside of the page limit.

1. Title of the Learning Lab along with the names of all team members and an appropriate page header (also known as a running head).

2. Description of the lab in about one paragraph.

3. Two-to-Three Learning Objectives: What do you hope for participants to gain from the lab?

Start this section in the form of “By the end of this Learning Lab, we hope that participants will be able to....”

While creating each learning objective, think about whether it connects with the chapter content or to a real-world application. Your learning objectives should be a mix of content and application.

4. Knowledge Gained: How will you assess if participants are meeting your learning objectives?

5. Learning lab details with specific references to the amount of time spent on each part of the lab. This part is to ensure that the team stays within the time limit. You might want to include a script, similar to a novel with each member as a character in the Lab.

6. References

7. Appendix (Optional)

Peer Evaluation Form: On the day of the learning lab each team member will submit a confidential evaluation form directly to the TA in hard-copy format. Peer evaluation will constitute 20% of the mark allocated to the Learning Lab Plan.

Learning Lab Group Code of Ethics: The Code of Ethics document aims to ensure that all group members behave in a professional manner and fulfill their responsibilities to the team. The document is used as a binding contract among team members with the aim that it clarifies work expectations and further includes a penalty system should a team member neglect the tasks assigned to them or produce work of poor or low quality as judged by the team.

OTHER COURSE MATTERS

CHECKING YOUR GRADES

Office hours with the lecture TAs are arranged following the release of test grades. Students should check their grades on Avenue as we will use these marks to calculate the final course grade. Discrepancies must be reported to the Professor within a week of receiving the grade.
RE-MARK POLICY
The re-mark policy in this course is slightly modified and reprinted with permission from Dr. Deborah Mowshowitz from the Department of Biological Sciences at Columbia University (New York, USA). Source: BiologyC2006/F2402-Spring2016-Regrade Requests. (2016, January 8). Retrieved from http://www.columbia.edu/cu/biology/courses/c2006/regrade_requests.html

The re-grade procedure is meant to correct serious errors in grading. It is not intended as an opportunity to argue about each judgment call made by the grader. Although it is true that TAs sometimes take off 1-2 points too many here and there, but they also give you 1-2 points too many just as often.

The re-grade policy is not intended to discourage students whose tests/assignments are graded incorrectly; rather it is an attempt to avoid frivolous requests.

Deadline: Within 1 week (unless a different date is announced in class and on Avenue), from the time that a test or assignment grade is published on Avenue (or following the date of a test review session).

Addition Errors: If there is an arithmetic error in adding up points, let us know immediately, and we will record the correct grade. This doesn't constitute a re-mark request.

How to Request a Re-mark?
Midterm: All tests are viewed during special review sessions. The dates & locations of the review sessions are posted on Avenue. Forms will be available upon arrival to the test review session so that students may complete them while reviewing each test. Please submit the completed form to the TAs. The instructional team will then have a meeting to make a decision on all appeals for re-grades.

Assignments: Please complete the form available on Avenue and send it to Dr. Khan via khan_pnb@mcmaster.ca

What Doesn't Merit a Re-grade?
"I wrote so much, and the grader didn't notice that the correct answer is buried somewhere within this long paragraph." To get full credit you must demonstrate the ability to pull out the relevant info and to exclude irrelevant info.

"I'm just 1 point away from an A, so I thought it was worth asking to find an extra point somewhere." It's not.

The Bottom Line on Re-grades
We apologize for being so hard-nosed about re-grades, but in our considerable experience, they consume an inordinate amount of effort, both yours and ours, for very little benefit. If you have a legitimate complaint, do not hesitate to submit a re-grade request. However, if you are thinking that your grade is not as good as you would like, and it would be nice to have a few more points, please do NOT send us a request. Read the next paragraph instead.
Looking to improve your marks?
If you are working hard in this course, but feel that your grades don't reflect your work, please meet with Dr. Khan as well as the TAs on a regular basis.
You may be spending a lot of time on the wrong things, and redirecting your efforts may really pay off.

Grades
Grades obtained in PSYCH2GG3 are converted according to the scheme generally used at McMaster University, which can be viewed here: http://registrar.mcmaster.ca/exams/grades/

When the final marks are obtained, ALL borderline cases are reviewed and, where warranted, adjustments are made in the final mark. E-mails regarding requests to increase final course grades are not answered.

Communication between Students and Faculty
The University’s official method of correspondence with students is through a valid McMaster University e-mail account. It is the student’s responsibility to keep the @mcmaster.ca account active and check it on a regular basis. All emails from students must include your full name, student #, and course code (PSYCH2GG3).

Student Responsibilities
To get the most out of the course, you must be prepared to:
• complete all readings and course requirements;
• attend all class meetings;
• attend all tutorial meetings;
• catch-up on the content presented during class and tutorials as some information shared during class or tutorial might not be available on Avenue;
• create a realistic study schedule;
• visit the Instructor and/or TAs during office hours for additional help.
• if struggling with course material, ask for help early;
• plan and manage your own time;
• check the course Avenue site, and your McMaster e-mail daily for updates; and,
• follow all university policies and guidelines, and in all ways be a responsible university member.

Senate Student Policies - http://www.mcmaster.ca/policy/Students-AcademicStudies/
Senate Policy Statements are also available from the Senate Secretariat Office, Room 104, and Gilmour Hall.

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and 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.
The following illustrate only three of many forms of academic dishonesty:

- plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained;
- improper collaboration in group work; and,
- copying or using unauthorized aids in quizzes, tests and examinations.

All students are reminded of the importance of academic integrity, and the serious consequences of academic dishonesty.

**Student Code of Conduct.** You acknowledge that your behaviour in all aspects of this course should meet the standards of the McMaster University Student Code of Conduct. You understand that any inappropriate behavior directed against any of your colleagues, teaching assistants, or the instructional team will not be tolerated. Disruptive behavior during any session (e.g. lecture, tutorial, review session) such as talking, sleeping or non-class computing while an individual presents information, or constantly being late, will also not be tolerated. Abuse, ridicule, slander, inappropriate language, and discrimination towards instructors teaching staff, teaching assistants and other students will not be tolerated in any capacity. Shared spaces including e-spaces such as the Avenue discussion board are to be considered inclusive and safe. To see the conduct policy, please go to [https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/](https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/)

**Plagiarism Detection.** 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 and in hard copy 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 [www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

**Copyright Policy.** In this course you will have access to material that is subject to copyright laws. This includes (but is not limited to) textbooks and all resources developed by the instructors such as quizzes, assignments, tests, class notes and class slides. Under no circumstance are you allowed to share or redistribute this material in any printed or electronic form without the explicit written consent of the copyright holder. This includes posting any course material on Internet bulletin boards, course repositories, social networks, etc.

**The instructor and the university reserve the right to alter this outline.** The university may change the dates and deadlines for any or all courses in extreme circumstances. 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.