Instructor: Rizwan Tahir

Email: tahirr1@mcmaster.ca

Office Location: KTH 405
Office hours: Tuesdays/Thursdays 12:00 pm to 1:00 pm

Telephone: 905 525 9140 Ext. 23826

<table>
<thead>
<tr>
<th>Section</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01</td>
<td>Tuesday/Thursday</td>
<td>1:00 pm to 4:00 pm</td>
<td>BSB B135</td>
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</table>

Teaching Assistant(s):
The name, office hours, and email address of the teaching assistant(s) will be posted on Avenue to Learn.

Course Description:
This course uses macroeconomic theory based on microeconomic theory to treat common topics encountered in macroeconomics. The course covers both theory and applications.

Required Textbook:
Stephen D. Williamson "Macroeconomics" Fifth Canadian edition, 2018, Pearson Education Canada, Toronto,

You can purchase a hardcopy from McMaster’s Campus Store or purchase a 180 days subscription to access the electronic version of the book at http://www.coursesmart.com/students
Learning Outcomes:

- Understand how to use mathematical models to understand macroeconomic issues.
- Understand how individual households make leisure, consumption and savings decisions to maximize their welfare.
- Understand how firms make hiring and investment decisions to maximize their profits.
- Understand how the joint behaviour of firms and households determines aggregate outcomes.
- Understand the forces/shocks driving business cycles.
- Understand how financial markets imperfections can affect the macroeconomy.
- Understand how fiscal and monetary policy can affect the macroeconomy.

Course Website

Avenue to Learn (avenue.mcmaster.ca) is McMaster’s learning management system and is where all the course material will be posted. Course material is posted under the ‘Content Tab’ on Avenue and includes:

- Course Outline
- PowerPoint Notes
- Selected textbook questions and answers
- Office hours of the instructor and teaching assistant
- Grades
- Announcements

Important Guidelines

A reading schedule is included in the syllabus. Students are assumed to have read the material ahead of the lectures. The lectures will focus on the most important and challenging parts of the material. More basic material will be left for the students to study on their own. I will refer to this more basic material in the lectures, hence the need to read ahead to understand the lectures.

A number of relatively simple mathematical concepts will be used in theoretical derivations. These include the graphical representation of a function, the slope of a function, linear algebra (including summation operator), natural logarithms, calculations of rates of changes and basic calculus.

The textbook has a useful mathematical appendix.
**Evaluation**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quizzes</td>
<td>7%</td>
<td>Weekly by Monday, 11:00pm (starting June 26th)</td>
<td>Avenue to Learn</td>
</tr>
<tr>
<td>2. iclickers</td>
<td>8% (best 80%)</td>
<td>Every lecture (starting June 21st)</td>
<td>In lecture</td>
</tr>
<tr>
<td>3a. Test #1</td>
<td>20%</td>
<td>Thursday, July 5th</td>
<td>In class</td>
</tr>
<tr>
<td>3b. Test #2</td>
<td>20%</td>
<td>Thursday, July 19th</td>
<td>In class</td>
</tr>
<tr>
<td>4. Final Exam</td>
<td>45% (with iclicker)</td>
<td>August 2nd 2018</td>
<td>In class</td>
</tr>
<tr>
<td></td>
<td>53% (without iclicker)</td>
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1. **Quizzes**

Quizzes will be administered through Avenue to Learn. All Quizzes will consist of Multiple-Choice questions. See below the detail information on the coverage, availability and due dates.

2. **iClickers**

Starting June 21st, we will make use of iclickers (or “clickers”) – an electronic response system that allows you to register an answer to questions asked in class. Your best 80% clicker sessions will count for 8% of the course grade. Each clicker session is graded out of 5 points. Three of the five are awarded for answering at least 75% of the questions posed in class, even if all of these are answered incorrectly. This is the “participation” portion of the clicker grade. One mark is awarded for each question answered correctly, to a maximum of two. This is the “performance” portion of the clicker grade. **Students with a higher grade on the final exam will have the grade weight from the iclickers shifted to the final exam.**

iClickers may be purchased through the campus store. Each student is responsible for buying a clicker, registering it (see below), bringing it to class, and ensuring that the batteries are in working order. Any of i>clicker2 (with screen), i>clicker+ (no screen) or the original i>clicker can be used.

According to McMaster University [Academic Integrity Policy](http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf)

*It shall be an offence knowingly to:*
q) impersonate another student either in person or electronically for the purpose of academic assessment.

Clicker Registration

Students must register their i>clickers each academic term. If you have successfully registered an i>clicker in the past, you must register it for the current term. Registrations do not carry over from one term to another.

Do NOT enter your student ID number when registering!
Instead enter your Mac ID which is the name before @ in your McMaster e-mail address.
See step 5 below.

To complete the student registration form, students must:

1. Go to https://www.iclicker.com/register-a-remote
2. Which software will your instructor use in class?
   Select: iClicker Classic (formerly iClicker 7)
3. Which Learning Management System does your institution use?
   Select: Brightspace/D2L
   Then choose “register directly on our website”
3. Enter your first name and last name in the appropriate fields.
5. Enter your Mac ID - which is the name before the @ symbol in your McMaster e-mail address - as student ID.
5. Enter your i>clicker remote ID. The remote ID is the 8-character alphanumeric code printed below the barcode on the back of your remote.
6. Enter the letters or numbers in the security image on the screen. This verification image is a slightly distorted series of characters used to prevent spam bots from submitting the form. Students can request another image if they find the first hard to see, or play an audio reading of it instead.
7. Click the Enter button. An on-screen message confirms that registration was successful.

For general iclicker inquiries, visit https://campusstore.mcmaster.ca/information/faq/iclicker-faq.html.

3a & 3b. Test #1 & Test #2
Both tests, 60 minutes long, will consist of 30 multiple choice questions and one short answer (either numerical or analytical) question. The material for each test is outlined below.

4. **Final Exam**

The final exam will be 2 hours in length and will be written during the final exam period. The exam will consist of 65 multiple choice questions and one short answer questions and is cumulative.

**Missing Quizzes and/or tests**

- There will be no makeup quizzes or makeup tests
- If you miss a test or quiz you will get a grade of zero unless you complete and submit a McMaster Student Absence Form (MSAF) which can be found at https://www.mcmaster.ca/msaf/
- With approved MASF, weight of the missed quiz or test will be shifted towards final exam.
- **NOTE: MSAF is not accepted for online quizzes and class participation through iclickers**

**Use of Calculators**

Only the Casio FX-991 series calculator may be used for tests and the exam (available in the bookstore).

**Photo ID**

You will be required to show your university photo ID at all tests and the exam.

**Scan Sheets**

For all tests and the final examination *multiple choice questions* to be answered on scan sheets. You must use an HB pencil to fill in these sheets and you are responsible for providing your own.
Important Dates

- Test # 1    Thursday, July 5\textsuperscript{th}
- Test # 2    Thursday, July 19\textsuperscript{th}
- Note: Both term tests will be held during the class time
- Final Exam: August 2\textsuperscript{nd} (In class)
- Course Withdrawal    Wednesday, July 18\textsuperscript{th}

E-mail Communication Policy

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student’s own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student’s responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion. Please do not send the instructor or the TAs emails from Avenue. We cannot respond to email sent from Avenue from our McMaster email account. We will only address emails sent to our McMaster account from a McMaster account. Lastly, please include the following information in your email: \textit{Subject heading, your name, student number and course.}

Student Accessibility Services (SAS)

Students with disabilities or special needs are advised to register with SAS. Please contact (905) 525-9140 ext. 28652 or sas@mcmaster.ca for information regarding its services and resources. For more information, see the SAS website: http://sas.mcmaster.ca/

Academic Integrity:

Please note: In order to maintain a culture of academic integrity, members of the McMaster university community are expected to promote honesty, trust, fairness, respect and responsibility. The policy for academic integrity is available at: http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf
# Detailed Reading Schedule

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics/Readings</th>
<th>Quizzes on Avenue</th>
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<tbody>
<tr>
<td>June 19&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Introduction&lt;br&gt;Chapter 1 &amp; Chapter 2</td>
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<tr>
<td>June 21</td>
<td>Measurement issues&lt;br&gt;Chapter 2 &amp; 3</td>
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<tr>
<td>June 26&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Consumer and Firm behaviour: The Work-Leisure decision and profit maximization&lt;br&gt;Chapter 4</td>
<td>Quiz #1 (Covers chapters 1, 2&amp;3)&lt;br&gt;Open June 22&lt;sup&gt;nd&lt;/sup&gt; 8:30 am&lt;br&gt;Closes June 25&lt;sup&gt;th&lt;/sup&gt; 11:30 pm</td>
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<td>June 28&lt;sup&gt;th&lt;/sup&gt;</td>
<td>A closed-economy one-period macroeconomic model&lt;br&gt;Chapter 5</td>
<td>Quiz #2 (Covers chapters 4 &amp; 5)&lt;br&gt;Open June 29&lt;sup&gt;th&lt;/sup&gt; 8:30 am&lt;br&gt;Closes July 1&lt;sup&gt;st&lt;/sup&gt; 11:30 pm</td>
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<tr>
<td>July 3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Economic growth: Malthus and Solow&lt;br&gt;Chapter 7</td>
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<tr>
<td>July 5&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Test # 1 (Covers chapters 1,2,3,4&amp;5)</strong></td>
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<tr>
<td>July 10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Income disparity among countries and Endogenous growth&lt;br&gt;Chapter 8</td>
<td>Quiz #3 (Covers chapters 7 &amp; 8)&lt;br&gt;Open July 11&lt;sup&gt;th&lt;/sup&gt; 8:30 am&lt;br&gt;Closes July 14&lt;sup&gt;th&lt;/sup&gt; 11:30 pm</td>
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<td>July 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>A Two-period Model: The consumption-savings decision and credit markets&lt;br&gt;Chapter 9</td>
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<tr>
<td>July 17&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Credit market imperfections&lt;br&gt;Chapter 10</td>
<td>Quiz #4 (Covers chapter 9 &amp; 10)&lt;br&gt;Open July 14&lt;sup&gt;th&lt;/sup&gt; 8:30 am&lt;br&gt;Closes July 17&lt;sup&gt;th&lt;/sup&gt; 11:30 pm</td>
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<tr>
<td>July 19&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Test # 2 (Covers chapters 7,8, 9 &amp; 10)</strong></td>
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<tr>
<td>July 24&lt;sup&gt;th&lt;/sup&gt;</td>
<td>A real intertemporal Model with Investment&lt;br&gt;Chapter 11</td>
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<tr>
<td>July 26&lt;sup&gt;th&lt;/sup&gt;</td>
<td>A real intertemporal Model with Investment&lt;br&gt;Chapter 11</td>
<td>Quiz #5 (Covers chapter 11)&lt;br&gt;Open July 26&lt;sup&gt;th&lt;/sup&gt; 8:30 am&lt;br&gt;Closes July 29&lt;sup&gt;th&lt;/sup&gt; 11:30 pm</td>
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<tr>
<td>July 31&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Review</td>
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<tr>
<td>August 2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td><strong>Final exam</strong></td>
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Note: The instructor reserves the right to modify elements of the course and will notify students accordingly (in class and post any changes to Avenue to Learn).