Course Details

Venue: TR 14:30-15:50, room: TORV 125
Prerequisite(s): Econ 801 or equivalent
Course Objective: This course introduces the concept of dynamic programming and demonstrates its application to a number of macroeconomic problems. The level of the course is chosen such as to equip students with some of the essential tools required to understand a wide range of classical and recent contributions in the field. Econ 801 and Econ 874 together cover many of the central areas of macroeconomics.

Required Textbook: See below.
Website: Some materials will be available on the course website on PAWS.

Instructor

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Office Hours: Monday, 13:30-14:15 and Thursday 16:10-16:50, or by appointment (check PAWS for changes in office hours)

Tentative Course Outline and Readings

0. General Introduction

1. Introduction to Dynamic Programming
   LS, Chapter 3 and Chapter 1
   OR, Chapters 1, 2
   Stokey, N. and R. Lucas: Recursive Methods in Economic Dynamics, Harvard University Press, 1989; Chapters 4 and 9 (Chapters 3, 7 and 8 provide the mathematical background)
   Deaton, Angus: Understanding Consumption, Oxford University Press, 1992; Chapters 1-3
2. Asset Pricing

   LS, the rest of chapters 13 and 14
   OR, Chapter 5


3. Buffer-stock Saving and Liquidity Constraints


4. Unemployment and Job Search

   Pissarides, Chapters 1 and 2

   LS, Chapter 26.1-26.7


5. Economic Growth

   Barro, Sala-i-Martin, Chapters 1.1-1.3, 2.1-2.6, 4.1, 6
   Barro, Sala-i-Martin, Introduction I.1-1.5, Chapters 5, 7, 8
   Aghion, Howitt, Introduction, Part I (all), Chapter 7
Optional topics:

6. Money and Informational Frictions
   OR, Chapter 8
7. Money as a Medium of Payment
   Walsh, C.E.: Monetary Theory and Policy, 3rd edition, MIT Press, 2010, Chapters 2 and 3
8. Money and Sticky Prices, and Monetary Policy
   Walsh, C.E.: Monetary Theory and Policy, 3rd edition, MIT Press, 2010, Chapters 6, 7 and 8
9. Social Insurance
   LS, Chapters 20 and 22.1-22.3 [LS2, Chapters 19 and 21.1-21.3]

**Required** readings for each topic are printed in **bold** font.

Please note that this is a tentative list of topics, and that both the course outline and the list of readings may be updated during the term. We will cover topics 1-5. Depending on students’ interests and time permitting, we may also cover one of the optional topics 6-9.

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**Required Textbook:**

*Note:* For our purposes, the second edition of this book will do just fine, too. The second edition is available as an online resource through the library webpage. Where different, the relevant chapters in the second edition are given as [LS2: Chapter xx] in the syllabus above.

**Recommended Books (for the unemployment and growth parts):**


**Other relevant books:**


Most of these books (except LS, which is available online, and Aghion and Howitt) are available from the library.
There will be three components to your grade:

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<th>Description</th>
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<tr>
<td>Participation</td>
<td></td>
<td>5%</td>
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<tr>
<td>Midterm Exam</td>
<td>TBA</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
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The weight of the midterm will be shifted to the final if this results in a better overall grade.

Exams: Exams will be cumulative and test your understanding of the subject material and your ability to analyse and formulate solutions to specific problems. The problem sets are intended to assist you in the preparation for the exams, but note that exam questions are typically different from problem set questions. The midterm exam is closed book. No electronic devices will be permitted during the exam, with the exception of simple calculators.

The final exam will either be a three-hour closed book exam similar in style to the midterm, or a take-home exam. The form of the final exam will be determined based on students’ preferences after the midterm.

Problem Sets: There will be several problem sets, covering all major topics of the course. You will have the option to hand them in to get feedback. All problem sets will be discussed in class.

Presentation: All students will be required to give a short (20-30 min) presentation on a macro-related topic of their choice during the second half of the term.

Academic Integrity

Please note that academic dishonesty is subject to severe penalty at the University of Saskatchewan. Any form of conduct not in line with the basic rules of academic integrity, including cheating and plagiarism, will not be tolerated. This course will conform to the academic requirements and standards, including Academic Misconduct (http://www.usask.ca/university_secretary/honesty/StudentAcademicMisconduct.pdf) and the rules of Student Appeals in Academic Matters (http://www.usask.ca/university_secretary/honesty/Student_Academic_Appeals.php). See http://www.usask.ca/university_secretary/honesty/ for details.

Attachment

“Integrity defined,” also available at http://www.usask.ca/university_secretary/pdf/dishonesty_info_sheet.pdf