# Advanced Macroeconomics I ECONOMICS EC3320B Department of Economics Western University

January 2022

**Instructor:** Elizabeth Caucutt

Office: 4043 SSC

**Phone:** (519) 661-2111 ext. 85235

E-mail: <u>ecaucutt@uwo.ca</u>
Office Hours: M/W 8:30-9:30.

**Recording policy:** The participants in the course are not allowed to record during office

hours or class.

Classroom meeting time(s) & location: M 9:30-11:30, W 9:30-10:30, SSC 3026

Course website: https://owl.uwo.ca/portal

Undergraduate Inquiries: 519-661-3507 or SSC room 4075 or econugrd@uwo.ca

**Registration:** You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <a href="https://student.uwo.ca">https://student.uwo.ca</a>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

**Prerequisite Note:** The prerequisite(s) for this course is (are) Economics 2221A/B and Economics 2261A/B

Prerequisite(s) for your course can be found in the Western Calendar at: <a href="http://westerncalendar.uwo.ca/Courses.cfm?Subject=ECONOMIC&SelectedCalendar=Live&ArchiveID">http://westerncalendar.uwo.ca/Courses.cfm?Subject=ECONOMIC&SelectedCalendar=Live&ArchiveID</a>

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record but will ensure that spaces become available for students who require the course in question for graduation.

**Course Description/Overview:** In this course we will develop the Neoclassical Growth Model and then use it as a tool for economic analysis. We will compare the implications of this model to data. We will discuss the successes and limitations of this model in explaining cross-country income differences. We will extend the model to incorporate business cycle fluctuations to see how well the model can account for short-run movements of the economy.

## **Course Learning Outcomes:**

- 1. Students will understand how the desire to consumption smooth is linked to parameters in CES preferences, and what the implications are as the desire to consumption smooth changes.
- 2. Students will be able to set up the firm's and the household's problem within the Neoclassical Growth Model, and then derive and interpret the corresponding Euler equation.
- 3. Students will define and characterize a competitive equilibrium and link the resulting allocation with that of the benevolent social planner using the welfare theorems.
- 4. Students will understand what it means to calibrate the Neoclassical Growth Model.
- 5. Students will be able to perform comparative statics exercises on the balanced growth path allocation in the Neoclassical Growth Model and understand the transitional dynamics of the economy in the Neoclassical Growth Model as it converges to a balanced growth path.
- 6. Students will be able to use the Neoclassical Growth Model for growth accounting and will be able to evaluate the model based on balanced growth path predictions.
- 7. Students will be able to extend the Neoclassical growth model to analyze short-run movements of the economy.

**Textbook/Resources:** There is no required text for this course. You are responsible for all content covered in lecture and any material posted on OWL. Note that I do not supply class notes.

**Grading:** Your final grade will be based on one midterm (35%), Homework (15%), and a Final exam (50%)

**Exams:** The midterm will be held in class on February 28 (tentative). The final exam date and time is TBA. The exams will be closed book and closed note, and electronics free. The final exam will be cumulative with an emphasis on more recent material. There will be no make-up midterm exam. If a student misses the midterm due to sickness or other acceptable excuse the student must present an official document justifying the absence and the weight of the midterm will be added to the final exam. In cases of lack of justification for the absence, a grade of zero will be attributed to the midterm.

**Homework:** There will be four homework assignments, due January 26, February 16, March 23, and April 6. The homework assignments must be submitted by the START of the class period in which they are due. How assignments are to be submitted either in person or on OWL is TBA. Assignments turned in late will not be accepted. The lowest score will be dropped.

**Self-Reported Absence:** If you choose to use an SRA for a homework assignment, the weight of that assignment (5%) will be placed on the final exam. You must contact me within 24 hours of the end of the period covered by the SRA to gain the exception.

#### **Class Conduct:**

- Please turn off and put away all electronic devices not being used for class purposes during class. You will get much more out of this course if your attention is on the lecture, and students who are multitasking are a distraction to me.
- No pictures/recording during class.
- Attendance does not directly play a role in your grade. However, students who do poorly in this course are almost always students who have weak attendance records. If you miss class, get notes from a classmate.
- The syllabus and your class notes are full of information. Please consult these for answers to frequently asked questions.

**Registration Note:** You are responsible for ensuring you are registered in the correct courses. If you are not registered in a course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at https://student.uwo.ca. If you notice a problem, please contact your home Faculty Academic Counselor immediately.

# **Topics Covered and Readings:**

Introduction to the Class

#### Basic Model

- Households
- Firms
- Aggregate Resource Constraint
- Competitive Equilibrium
- Characterization of Equilibrium

#### Social Planner

- The Social Planner's Problem
- Characterization of the Social Planner's Problem
- The Welfare Theorems
- Steady State Analysis
- Dynamic Analysis

#### Neoclassical Growth Model

- Social Planner's Problem
- Balanced Growth Path
- Calibration
- Comparative Statics
- Transitional Dynamics
- Convergence

- Growth facts
- Growth Accounting
- The Productivity Slowdown

# The Real Business Cycle Model

- Households
- Firms
- Equilibrium
- Calibration
- Evaluating the model

# **Copyright:**

Lectures and course materials, including power point presentations, outlines, and similar materials, are protected by copyright. Students may take notes and make copies of course materials for their own educational purposes. Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, wiki material, and other course materials publicly and/or for commercial purposes without written consent.

# Please Note Department & University Policies for Winter 2022

The University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

- 1. **Guidelines, policies, and your academic rights and responsibilities** are posted online in the current Western Academic Calendar at: <a href="http://westerncalendar.uwo.ca">http://westerncalendar.uwo.ca</a>. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated policies and procedures.
- 2. Students must familiarize themselves with the "Rules of Conduct for Examinations" <a href="http://www.uwo.ca/univsec/pdf/academic\_policies/exam/administration.pdf">http://www.uwo.ca/univsec/pdf/academic\_policies/exam/administration.pdf</a>.
- 3. Cheating as an academic offence: Students are responsible for understanding what it means to "cheat." The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as suspension or expulsion.
- 4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at <a href="http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\_20">http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\_20</a>).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

- 5. It is a Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students must submit assignments to the instructor.
- 6. **Appeals**: University policies and procedures for appealing a mark can be found in the Student Academic Appeals section in the current Western Academic Calendar at: <a href="http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\_14">http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\_14</a>. **Please note the relevant deadlines.**

Department of Economics procedures for appealing a mark can be found here: <a href="https://economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals">https://economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals</a>. The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to <a href="economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals">economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals</a>. The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to <a href="economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals">economics.uwo.ca/undergraduate/program\_counselling/responsibilities\_policies.html#appeals</a>.

7. **Systematic adjustments of a class grade distribution** (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

#### 8. Note the following add and drop deadlines:

Deadline to <u>add</u> a second term half course: **Tuesday January 18, 2022**Deadline to <u>drop</u> a second term half course: **Monday March 14, 2022** 

## **Policy Regarding Makeup Tests and Final Examinations**

Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

#### **Policies Regarding Academic Accommodation**

- The Faculty of Social Science's policies on academic accommodation are found at <a href="https://counselling.ssc.uwo.ca/procedures/academic\_consideration.html">https://counselling.ssc.uwo.ca/procedures/academic\_consideration.html</a>
- Accommodation for Students with Disabilities: Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD, see <a href="http://academicsupport.uwo.ca/accessible\_education/index.html">http://academicsupport.uwo.ca/accessible\_education/index.html</a>), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: Academic Accommodation for Students with Disabilities.
- Rewriting Exams and Retroactive Reweighting are NOT Permitted: Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Self-Reported Absences cannot be used once a student has proceeded to start to write a test or exam.
- Self-Reported Absences: Students will have two opportunities during the fall and winter terms to receive academic consideration if they self-report a missed assessment using the online self-reported absence portal, provided the following conditions are met: the assessment is missed due to an absence of no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted otherwise on the syllabus. Students are not able to use the self-reporting option in the following circumstances:
  - for exams scheduled by the Office of the Registrar (e.g., final exams)
  - absence of a duration greater than 48 hours
  - assessments worth more than 30% of the student's final grade
  - if the student has opened or started the test or exam
  - if a student has already used the self-reporting portal twice during the fall/winter terms

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate (SMC) if the absence is medical or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office for more information

about the relevant documentation. It is strongly recommended that students notify the instructor as soon as possible, ideally before the assessment, when they become aware of an absence. University policy is that students must communicate with their instructors no later than 24 hours after the end of the period covered by the SMC or immediately upon their return from their documented absence. Failure to follow University policy and procedures may result in denial of academic accommodation and a grade of zero.

- Documentation for Accommodation: Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons. All required documentation for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.
- Western University policy on Consideration for Student Absence is available here: Policy on Academic Consideration for Student Absences Undergraduate Students in First Entry Programs.
- **Student Medical Certificate (SMC):** This form is available here: <a href="http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf">http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf</a>
- **Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give <u>reasonable notice in writing</u>, <u>prior to the holiday</u>, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the <u>Western Multicultural Calendar</u>.

Policy Regarding Class Attendance and Engagement: If the instructor deems a student's attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

**Statement on Mental Health and Support Services:** Students under emotional/mental distress should visit <a href="https://uwo.ca/health/mental\_wellbeing/">https://uwo.ca/health/mental\_wellbeing/</a> for more information and a complete list of resources on how to obtain help.

**Statement on Remote Proctoring:** While Western intends to hold most classes, mid-terms and finals in-person, the London-Middlesex Health unity may require western to teach in a remote format. If this occurs, all assessments will be done remotely and may involve the use of remote proctoring software (i.e., Proctorio, ProctorTrack). Instructors will provide information on the details should the need arise.