

**KYIV SCHOOL OF ECONOMICS**  
**Computational Economics, Fall 2012**

Instructor: Maksym Obrizan

Time & Location: Time varies - please check the schedule, Room 206

Instructor's Office: 317

Office Hours: whenever my office door is open (for questions not related to grading) or by e-mail appointment

E-mail: mobrizan@kse.org.ua or mobrizan@gmail.com

E-mail should be used only for organizational issues - if you have a question about course material please see me in person.

**Text:** Burkhard Heer and Alfred Maussner. Dynamic General Equilibrium Modeling: Computational Methods and Applications. 2nd edition. 2009.

**Course Description:**

This is a course in numerical methods for economists. In this course we will review the neoclassical growth model, introduce you to programming in Matlab, learn how to iterate on value function and work through multiple numerical examples. Special attention will be given to microeconomic applications - we will consider a firm-level dynamics model by Hopenhayn and Rogerson. Required readings will include lecture notes and supplementary materials distributed in class.

**Weekly Schedule (preliminary):**

*Week 1.* Theory underlying the Ramsey model.

*Week 2.* The finite horizon Ramsey model. Matlab primer.

*Week 3.* The infinite horizon Ramsey model. Value function iteration.

*Week 4.* Numerical examples and Midterm.

*Week 5.* Basic overlapping generation models.

*Week 6.* Microeconomic application: Hopenhayn and Rogerson model.

*Week 7.* Introduction to heterogeneous agents model (if time permits).

**Grading:**

Letter grades will be distributed according to standard KSE grading scale based on the following:

Assignment	% of Grade	Dates
3 Homeworks	40%	TBA (the lowest score will have 50% weight)
Unannounced Quizzes	10%	Two lowest scores dropped, number of quizzes 4-8
Midterm	20%	November 15th (in class)
Final	30%	Week of December 17th

Homeworks are due in the beginning of class. Homeworks submitted 10 minutes after the class starts **will not be accepted** (but you can request them to be graded with 0 score). The purpose of unannounced quizzes is (i) to make sure that you do your reading not just before the exams and (ii) to check attendance (50% of the quiz score is given just for being present). There will be no makeups for quizzes that you miss. Final exam will be comprehensive - it will also include questions from the material taught before the midterm.

**Policy on Student Attendance:**

It is expected that you attend classes regularly. In the case of emergency when you must skip a class, it is your sole responsibility **to copy lecture notes from a classmate**. At least part of the exam material will be based on lectures and not on the textbook.

**Students with Disabilities:**

If you have a disability that may require some modification of seating, testing, or any other class requirement, please let me know as soon as possible so that appropriate arrangements can be made. Please see me after class, during office hours, or schedule an appointment.

**Academic Dishonesty:**

You are more than welcome to work on homework problems together. However, each student **must turn in answers that are in her own words. Copying another student's assignment is cheating!** What makes our program different from a typical ex-Soviet University is that academic dishonesty will not be tolerated. Cheating on any assignment or quiz will result in zero grade for that assignment. Cheating on the exam will result in immediate failing grade for the entire course and your possible expulsion from the program.

During exams and quizzes you cannot use any electronic devices, teaching and supplementary materials and **calculators** without prior permission. Any instance of cheating will be reported to the KSE administration and all faculty which will make your life difficult in the future (for example, when requesting a letter of recommendation for a job etc). While you should not cheat, I do not

expect you to inform on somebody else cheating.

**Policy on Using Cell Phones and Other Electronic Devices:**

Please do not distract other students during the class by using your cell phones or other electronic devices. Your equipment should be in a silent mode of operation. Please do not be surprised if I ask you to leave when your phone rings in class.

**Policy on Student Complaints:**

You are welcome to discuss a complaint with the instructor after class or during office hours. If you have a complaint or concern that you do not feel can be or has been addressed adequately by the instructor, you should take the matter up with the KSE academic director Denys Nizalov.

**Sexual Harassment:**

If you feel that you are being or have been harassed or you are not sure what constitutes sexual harassment you are encouraged to discuss this issue with the KSE administration.

**Suggested Solutions:**

Preparing detailed suggested solutions is quite time-consuming process but is intended to help you learn more efficiently. While I will be happy to clarify parts that you do not understand from suggested solutions, I (quite naturally) expect you to read them **before** you come to see me.

**Policy on Re-Grading:**

All re-grading requests should be made by e-mail with a copy sent to KSE academic director Denys Nizalov. The only exception to this rule is algebraic error in adding scores (say  $34+12$  was counted as 36 instead of 46). I will re-grade your assignment within 7 business days from your request. Your e-mail request should contain the following three statements:

1. I declare that I have carefully read Syllabus for this course.
2. I declare that I have carefully read Suggested Solutions to this assignment (if applicable).
3. I realize that the whole assignment **must** be re-graded and that my score can actually go down as a result of re-grading.