University of Wisconsin-Whitewater

Curriculum Proposal Form #3

## New Course

**Effective Term:**

**Subject Area - Course Number:** **ECON 732 Cross-listing:**

(See Note #1 below)

**Course Title:** (Limited to 65 characters) Macroeconomic Theory

**25-Character Abbreviation:** Macro Theory

**Sponsor(s):** Eylem ERSAL KIZILER; Yamin AHMAD

**Department(s):** Economics

**College(s):**

# **Consultation took place**: [x]  NA [ ]  Yes (list departments and attach consultation sheet)

Departments:

**Programs Affected:**

**Is paperwork complete for those programs?** (Use "Form 2" for Catalog & Academic Report updates)

[x]  NA [ ]  Yes [ ]  will be at future meeting

**Prerequisites:** Entry into MS Economics Program

**Grade Basis:** [x]  Conventional Letter [ ]  S/NC or Pass/Fail

**Course will be offered:** [x]  Part of Load [ ]  Above Load

 [x]  On Campus [ ]  Off Campus - Location

**College:**  **Dept/Area(s):** Economics

**Instructor:** Eylem ERSAL KIZILER, Yamin AHMAD

 *Note: If the course is dual-listed, instructor must be a member of Grad Faculty.*

**Check if the Course is to Meet Any of the Following:**

[ ]  Technological Literacy Requirement [ ]  Writing Requirement

[ ]  Diversity [ ]  General Education Option:

Note: For the Gen Ed option, the proposal should address how this course relates to specific core courses, meets the goals of General Education in providing breadth, and incorporates scholarship in the appropriate field relating to women and gender.

**Credit/Contact Hours:** (per semester)

Total lab hours: 0 Total lecture hours: 48

Number of credits: 3 Total contact hours: 48

**Can course be taken more than once for credit? (Repeatability)**

[x]  No [ ]  Yes If "Yes", answer the following questions:

No of times in major:       No of credits in major:

No of times in degree:       No of credits in degree:

Proposal Information: ([***Procedures for form #3***](http://acadaff.uww.edu/UCC/Curriculum_Handbook_09/Procedures_form3.docx))

**Course justification:**

This proposed course will be one of the core courses that students entering the MS Economics Program will be required to take. It will expose the students to the techniques and models used in modern macroeconomic research and analysis.

**Relationship to program assessment objectives:**

Since the course will be one of the core courses of the MS Economics Degree, all students entering the program will be required to take this course.

Analytical and critical thinking, and quantitative skills as well as economic literacy are the learning objectives of the degree that this course addresses. The specific student learning outcomes (traits) that this course attends are:

* Students are able to identify and structure of intertemporal problems of consumption and saving.
* Students are able solve intertemporal problems using optimization techniques.
* Students have a thorough understanding of core macroeconomic concepts such as steady state, capital accumulation, consumption smoothing, and permanent income hypothesis.

**Budgetary impact:**

* **Staffing**:- the course will be staffed by a Economics Department faculty that is Academically Qualified (AQ) and has Grad Faculty status.
* **Academic unit library and service & supply budget:** - no budgetary impact.
* **Campus instructional resource units**:- impact is minimal; students will require the use of Matlab (- a 4th generation computing language) in the course, and Matlab is available in the General Access labs in the Library and McGraw. In addition, Matlab is available in the computer labs in Hyland Hall where the course is anticipated to take place.
* **Laboratory/studio facilities:**- No budgetary impact
* **Classroom space:**- A classroom is anticipated to be required in Hyland Hall to teach the class. The class will meet for 1hour 15 minute session, twice per week.
* **Evaluation of adequacy of current library holdings, recommendations for acquisitions, and impact of the course on the academic unit library allocation budget:** - No impact. The course will be taught using a graduate textbook which students will be required to obtain.
* **Explanation if the course is simply replacing another course, either entirely or in the cycle:**- This is a new course for the MS Economics degree, and does not replace any other courses.

**Course description:** (50 word limit)

Macroeconomics is concerned with the behavior of aggregate economic variables such as GDP or unemployment and the relationship between these variables. This course provides a rigorous introduction to the techniques and models required for these analyses, which form the building blocks of modern macroeconomics as practiced by researchers today.

**If dual listed, list graduate level requirements for the following:**

1. **Content** (e.g., What are additional presentation/project requirements?)

N/A

2. **Intensity** (e.g., How are the processes and standards of evaluation different for graduates and undergraduates? )
N/A

3. **Self-Directed** (e.g., How are research expectations differ for graduates and undergraduates?)
N/A

**Course objectives and tentative course syllabus:**

**Econ 732 Macroeconomic Theory**

**Fall 2014**

**Dr. Yamin AHMAD**

**Email:** ahmady@uww.edu

**Office:** HH4402

**Tel:** x5576

**Class times:** TBD

**Final Exam Schedule:** TBD

The University Registrar determines the final exam schedule and it cannot be changed.

**Prerequisites:** Entry into the MS Economics Degree

**Resources for the course:**

* Required Textbook: Romer, D., *Advanced Macroeconomics*, 4th edition, (McGraw-Hill), ISBN: 978-0073511375

The following texts will be useful for the course:

* Barro, R. and Xavier Sala-i-Martin, *Economic Growth*, 2nd Edition, 2003 (MIT Press), ISBN: 978-0262025539
* Davis, M. , *Macroeconomics*, 1st Edition, 2009, (Cambridge Press), ISBN: 978–0-521-76247-2
* McCandless, G., *The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models*, 1st Edition, 2008, (Harvard University Press), ISBN: 978-0674028142

**Office hours:** Walk-in: TR 3:30 pm - 6:30 pm, and by appointment; Electronic: W 10:00 am - 12:00 pm.

**Please read the syllabus fully and carefully, and keep it in your records. If you remain enrolled in this course after reading this syllabus, it means you agree to comply with its terms.**

**Course Description and Objectives**

Macroeconomics is concerned with the behavior of aggregate economic variables such as GDP or unemployment and the relationship between these variables. This course provides a rigorous introduction to the techniques and models required for these analyses, which form the building blocks of modern macroeconomics as practiced by researchers today.

In this course, students will learn about the following important techniques: the use of differential equations to see how economies change through time, optimization techniques such as Lagrangeans and Hamiltonians, linearization methods and differential calculus. These techniques will be used in topics such as the Solow-Swan growth model, the Ramsey-Cass-Koopmans model of growth and savings and will be advanced towards the development of Real Business Cycle models and dynamic general equilibrium theory.

The role of the course is to ensure that students can proceed to more advanced study. Consequently, students taking the course will be versed in the methods and techniques needed for developing dynamic models, investigating macroeconomic issues, and will be able to read papers on more specific topics and pursue their own macroeconomic research.

**Course Performance Assessment and Grading**

This course has the following requirements, which will be used to assign you a grade at the end of the semester. There will be assignments, a midterm exam and a final exam. These will be weighted as follows:

|  |  |
| --- | --- |
| Assignments  | 20% |
| Midterm Exam | 35% |
| Final Exam | 45% |
| TOTAL | 100% |

The letter grades will only be assigned to the total grades you get at the end of the course. Below table provides general guidelines. Please note that it is only an approximation.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | >=86% |  |  | C+ | 66-69% |
| A- | 82-85% |  |  | C | 62-65% |
| B+ | 78-81% |  |  | C- | 56-61% |
| B | 74-77% |  |  | D | 50-55% |
| B- | 70-73% |  |  | F | <50% |

**Attendance Policy**

Enrollment in this course is taken as a commitment from you that you have made room in your life to fulfill the obligations of this course - coming to class, being there for exams when they are scheduled, etc.  I will not record attendance, but you will find yourself at a significant disadvantage if you miss class.  **It is the student’s responsibility to obtain any materials or information missed due to absence.**

**Advice**

The key piece of advice that I would say to you is to make sure you spend sufficient time trying to grasp the ideas that are being presented in class and in the papers you will read. These ideas are often complex and it takes time to fully grasp the issue at hand. You may find it useful as well to attend my office hours with any questions that you have. However, if you choose to use office hours, please come prepared with a list of questions, as that will probably allow us to use the time more effectively.

There is a lot of math in this course**. If you get stuck or feel like you’re falling behind, talk to your peers and do come to my office hours!** Come and see me if you have any questions whatsoever, be it about the material, or some concept you haven’t fully grasped yet. It will be easier for me to put you on the right track rather than have you struggle through something that you do not understand.

**Policy Statement**

*The University of Wisconsin-Whitewater is dedicated to a safe, supportive and non-discriminatory learning environment.  It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University Sponsored Events.  (For details please refer to the Undergraduate and Graduate Timetables; the “Rights and Responsibilities” section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the “Student Academic Disciplinary Procedures” [UWS Chapter 14]; and the “Student Nonacademic Disciplinary Procedures” [UWS Chapter 17].*

**UWW Student Honor Code**

*As members of the University of Wisconsin – Whitewater College of Business & Economics community, we commit ourselves to act honestly, responsibly, and above all, with honor and integrity in all areas of campus life.  We are accountable for all that we say and write.  We are responsible for the academic integrity of our work.  We pledge that we will not misrepresent our work nor give or receive unauthorized aid.  We commit ourselves to behave in a manner that demonstrates concern for the personal dignity, rights and freedoms of all members of the community.  We are respectful of college property and the property of others.  We will not tolerate a lack of respect for these values.*

*This code originated at Wheaton College.*

**Course Outline and Reading List**

This course outline is tentative and I reserve the right to amend the schedule as I see fit. These changes will be announced in class and posted on the course webpage. We will cover as many topics as time permits, which in turn will depend on the pace of the class.

1. Introduction to Macroeconomics: Long-run Growth and Short-run Fluctuations

*Davis Chapter 5*

1. Exogenous Growth Models
	* The Solow Model and Growth Accounting

*Romer Chapter 1; Barro & Martin Chapter 1*

* + The Ramsey-Cass-Koopmans Model

*Romer Chapter 2; Barro & Martin Chapter 2*

1. Neoclassical Growth Model

*King, Robert, Charles Plosser, and Sergio Rebelo (1988). “Production, Growth and Business Cycles”, Journal of Monetary Economics, 21, pp. 195-232.*

*King, Robert, Charles Plosser, and Sergio Rebelo (2001). “Production, Growth and Business Cycles: Technical Appendix.*

1. Business Cycle Theory: RBC Models and Dynamic General Equilibrium Theory

*Romer Chapter 4; McCandless Chapter 6*

**Tentative Schedule**

Week 1: Introduction

Week 2 -4: The Solow Model and Growth Accounting

Week 5-7: The Ramsey-Cass-Koopmans Model

Midterm Exam

Week 8-11: The Neoclassical Growth Model

Week 12-15: The Business Cycle Theory

**Bibliography:** (Key or essential references only. Normally the bibliography should be no more than one or two pages in length.)

1. Required Textbook: Romer, D., *Advanced Macroeconomics*, 4th edition, (McGraw-Hill), ISBN: 978-0073511375
2. Barro, R. and Xavier Sala-i-Martin, *Economic Growth*, 2nd Edition, 2003 (MIT Press), ISBN: 978-0262025539
3. Davis, M. , *Macroeconomics*, 1st Edition, 2009, (Cambridge Press), ISBN: 978–0-521-76247-2
4. McCandless, G., *The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models*, 1st Edition, 2008, (Harvard University Press), ISBN: 978-0674028142
5. Cass, David (1965): “Optimum growth in an aggregative model of capital accumulation,” Review of Economic Studies, 32, 233–240.
6. Cooley, Thomas F. (1995). *Frontiers of Business Cycle Research*. Princeton: Princeton University Press. [ISBN](http://en.wikipedia.org/wiki/International_Standard_Book_Number) 0-691-04323-X.
7. Gomes, Joao; Greenwood, Jeremy; Rebelo, Sergio (2001). "Equilibrium Unemployment". *Journal of Monetary Economics* 48 (1): 109–152.
8. Hansen, Gary D. (1985). "Indivisible labor and the business cycle". *Journal of Monetary Economics* 16 (3): 309–327.
9. Keynes, John M. (1936). The General Theory of Employment, Interest and Money, MacMillan, Cambridge University Press.
10. King, Robert, Charles Plosser, and Sergio Rebelo (1988). “Production, Growth and Business Cycles”, *Journal of Monetary Economics* 21, pp. 195-232.
11. Koopmans, Tjalling C. (1965): “On the concept of optimal economic growth,” in (Study Week on the) *Econometric Approach to Development Planning*, chap. 4, pp. 225–87. North-Holland Publishing Co., Amsterdam.
12. Kydland, Finn E.; Prescott, Edward C. (1982). "Time to Build and Aggregate Fluctuations", *Econometrica* 50 (6): 1345–1370.
13. Long, John B., Jr.; Plosser, Charles (1983). "Real Business Cycles". *Journal of Political Economy* 91 (1): 39–69.
14. Lucas, Robert E., Jr. (1977). "Understanding Business Cycles". *Carnegie-Rochester Conference Series on Public Policy* 5: 7–29.
15. Phelps, Edmund S. (1961): “The Golden Rule of Accumulation,” *American Economic Review*, pp. 638–642.
16. Plosser, Charles I. (1989). ["Understanding real business cycles"](http://www.jstor.org/stable/1942760). *Journal of Economic Perspectives* 3: 51–77.
17. Ramsey, Frank (1928): “A Mathematical Theory of Saving,” *Economic Journal*, 38 (152), 543–559.
18. Schumpeter, Joseph A. (1939). Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process, New York, McGraw-Hill.
19. Solow, Robert M. (1956). “A Contribution to the Theory of Economic Growth,” Quarterly Journal of Economics, 70: 65—94.
20. [Summers, Lawrence H.](http://en.wikipedia.org/wiki/Lawrence_Summers) (1986). ["Some Skeptical Observations on Real Business Cycle Theory"](http://www.minneapolisfed.org/research/QR/QR1043.pdf). *Federal Reserve Bank of Minneapolis Quarterly Review* 10 (Fall): 23–27.