

**Syllabus**  
Economics 496  
Advanced Macroeconomics  
Winter 2018

**Instructor:** Matthew Doyle  
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**Office Hours:** Mondays and Wednesdays: 9:30-11am

**Meetings:**

This class meets on Tuesdays and Thursdays from 11:30am-12:50pm in PAS 1241.

**Overview:**

Calendar Description: *This course provides students with the methodological principles that underlie modern analyses of the macro-economy, and to prepare students for graduate-level macroeconomic theory courses.*

This iteration of Econ. 496 will cover the theory of banking. The first half of the course is concerned with questions about the existence and role of banks (why do banks exist? what economic functions are served by banks that cannot be served by markets or other types of financial intermediaries?). The second half of the course will cover topics in banking related to bank panics and the recent financial crisis.

We will approach this topic by covering classic as well as recent academic papers that contribute to the theory of banking. The purpose of this approach is to illustrate how economists apply the sorts of models and ideas that you have been taught through the theory/macro sequence to the study of particular economic institutions and questions.

The format of the class is that students will be assigned readings prior to class. During class, one or more students will present or summarize portions of the assigned paper. The presentations will serve as a basis for class discussion of each paper. Written assignments will be based on the papers and/or class discussions.

**Textbook & Readings:**

There is no textbook for the class, as the class will be organized around the discussion of several academic papers. A tentative list of readings is included in this syllabus. Most of the papers are published in academic journals to which the university library has a subscription. I have provided links to the published versions of the articles where listed. The links work from on campus computers, and you may also be able to access them from off campus via a [proxy server](#) (though this depends on what online rights the library has paid for).

## **Evaluation:**

Midterm Exam: There will be one midterm exam, worth 25% of the final grade. The midterm will take place in class on February 28<sup>th</sup>.

Final Exam: There will be a final exam, which will be worth 40% of the final grade. The Final Exam will take place during the final examination period, and will be scheduled by the Registrar's Office.

Written Assignments: There will be several graded homework assignments throughout the semester. These will (collectively) be worth 15% of the final grade. Assignments will be submitted via the dropbox on Learn, and returned in class.

Class Participation: Class participation will be worth 20% of the final grade. It consists of two elements, each of which will be equally weighted:

i) students will be expected to submit questions/comments about each of the readings prior to the in class discussions via the dropbox on Learn. I will post due dates on Learn (typically, 9am on the Monday for a paper that we will discuss in the Tuesday class). These submissions should demonstrate that the student has read the paper in detail enough to have a constructive comment and/or question and/or idea of alternative applications or modeling,

and,

ii) attendance in all classes is expected, and will constitute part of the participation grade. Students will be expected to participate in the class discussion of the readings as they are presented in class. Students should also be prepared to present parts of the readings in front of the class upon the instructor's request. Grades will reflect whether a student's presentations and contributions to class discussions demonstrate an understanding of the readings and an ability to clearly communicate key points.

## **Policy on Missed Exams, Assignments, and Classes:**

No make-up tests will be provided. A student who does not have a relevant medical certificate will receive a mark of zero on a missed test. Such a student's final grade will be computed in accordance with the formula specified above. For students who do have a relevant medical certificate, the weight from the missed midterm will be applied to the final exam.

Late assignment submissions will receive a daily penalty of 20% (that is, if the assignment is graded at  $x\%$ , the grade received will be  $(x-20)\%$ ). Submissions will not be accepted if either the graded assignments have been returned, or the assignment solutions have been taken up in class. If a medical or personal accommodation is warranted, the weight from a missed assignment will be applied to the final exam. Note that being sick on the due date of the assignment is not sufficient to warrant accommodation.

Clearly, in order to receive participation marks for presentations and class discussion (elements ii) and iii) under class participation), students must be present in class on days where the readings are being presented and discussed. Students who have one unexplained absence will not see their grades adversely effected. Students with multiple absences will see their grades penalized proportionally to their absence (i.e. students who miss 20% of the classes will receive a 20% penalty to elements ii) and iii) of their participation grade). If medical or personal accommodations are warranted, a student will be excused for a missed class, for the purposes of participation grades. This form of accommodation will apply up to a maximum of 25% of the total number of classes. Extended illness will be treated on a case-by-case basis and in accordance with University policy.

When illness is the cause of a missed deadline, students should seek medical treatment and provide confirmation of the illness to the instructor(s) within 48 hours by submitting a completed [University of Waterloo Verification of Illness Form](#) to support requests for accommodation due to illness.

## **Tentative Schedule and Reading List**

Individual readings, especially in the second half of the semester, may change to accommodate student and/or instructor interest. Dates are tentative and subject to change.

### **1. Introduction and Review**

Jan. 8<sup>th</sup>-Jan. 10<sup>th</sup>

#### **a. Frictionless exchange**

Varian, H. (2014), *Intermediate Microeconomics* (9th ed.). New York: W.W. Norton and Company.

- chapters 32 and 33,
- on course reserve at Dana Porter library

#### **b. Banking and securities markets**

Modigliani, F. and M. H. Miller (1958), "[The Cost of Capital, Corporation Finance and the Theory of Investment](#)," *The American Economic Review*, **48**, 261-297.

Ball, L. (2012), *Money, Banking, and Financial Markets* (2<sup>nd</sup> ed.). New York: Worth Publishers

- chapters 5, 6, 8, 9, and 10
- on course reserve at Dana Porter library

## **2. Banks: Existence and Functions**

Jan. 15<sup>th</sup>-Jan. 17<sup>th</sup>

### **a. Delegated Monitoring**

Diamond, D. (1984) "[Financial Intermediation and Delegated Monitoring](#)," *Review of Economic Studies*, **51**, 393-414.

### **b. Information Provision**

Jan. 22<sup>nd</sup>-Jan. 24<sup>th</sup>

Boyd, J. and E. Prescott (1986), "[Financial Intermediary Coalitions](#)," *Journal of Economic Theory*, **38**, 211-232.

### **c. Consumption Smoothing**

Jan. 29<sup>th</sup>-Jan. 31<sup>st</sup>

Diamond, D. and P. Dybvig (1983), "[Bank Runs, Deposit Insurance, and Liquidity](#)," *Journal of Political Economy*, **91**, 401-419.

### **d. Commitment and Incomplete Contracts**

Feb. 5<sup>th</sup>-Feb. 7<sup>th</sup>

Diamond, D. and R. Rajan (2001), "[Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking](#)," *Journal of Political Economy*, **109**, 287-327.

### **e. Payments Clearing**

Feb. 12<sup>th</sup>-Feb. 14<sup>th</sup>

Freeman, S. (1996), "[The Payments System, Liquidity, and Rediscounting](#)," *American Economic Review*, **86**, 1126-1138.

### **f. Information and Liquidity**

Mar. 5<sup>th</sup>- Mar. 7<sup>th</sup>

Dang, T.V., G. Gorton, B. Holmström, and G. Ordóñez (2017), "[Banks as Secret Keepers](#)," *American Economic Review*, **107**, 1005-1029.

### **3. Banking Crises and Panics**

#### **a. Panics**

Mar. 12<sup>th</sup>

Calomiris, C. and G. Gorton (1991), "[The Origins of Banking Panics: Models, Facts, and Bank Regulation](#)," In R. Glenn Hubbard (Ed.), *Financial Markets and Financial Crises*. Chicago: University of Chicago Press.

Mar. 12<sup>th</sup> - Mar. 19<sup>th</sup>

Allen, F. and D. Gale (1998), "[Optimal Financial Crises](#)," *Journal of Finance*, **53**, 1245-1284.

#### **b. Collateral Crises**

Mar. 21<sup>st</sup>

Gorton, G. (2008), "[The Panic of 2007](#)," in *Maintaining Price Stability in a Changing Financial System*, Federal Reserve Bank of Kansas City Economic Policy Symposium Proceedings, 131-262.

Holmström, B. (2008), "[Commentary: The Panic of 2007](#)," in *Maintaining Price Stability in a Changing Financial System*, Federal Reserve Bank of Kansas City Economic Policy Symposium Proceedings, 263-273.

Mar. 26<sup>th</sup> - Apr. 2<sup>nd</sup>

Gorton, G. and G. Ordonez (2014), "[Collateral Crises](#)," *American Economic Review*, **104**, 343-378.

Apr. 4<sup>th</sup>

Holmström, B. (2015), "[Understanding the Role of Debt in the Financial System](#)," BIS working paper, no. 479.

## Statements and links that must be included on all course outlines

### Cross-listed course (requirement for all Arts courses)

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

### Academic Integrity

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity webpage](#) for more information.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. Check [the Office of Academic Integrity](#) for more information. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

### Accommodation for Students with Disabilities

**Note for students with disabilities:** The [AccessAbility Services](#) office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.