Online Course Syllabus

Syllabus for International Finance 440.639 (Also known as Open-Economy Macroeconomics or International Macroeconomics) Fall 2017

Advanced Academic Programs
Zanvyl Krieger School of Arts and Sciences
Johns Hopkins University

Section 1
Instructor, Course Information, and Objectives

Professor Information

Professor:	Brendan Epstein, Ph.D.
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Office Hours:	TBA.
About your Instructor:	Website: https://sites.google.com/site/brendanepstein/ (I am a former Senior Economist at the Board of Governors of the Federal Reserve System in Washington, DC, where I worked for nearly six years before taking a full-time academic position. My specialization within the discipline of Economics is at the intersection of International Economics, Labor Economics, and Macroeconomics.

Course Description

This course provides an overview of open economy macroeconomics, and international financial markets and policies. The focus is on exchange rate determination, the importance of the balance of payments for both the domestic economy and the economies of other countries, international capital flows, the impact of internal debt on the balance of trade, and the interaction and potential conflicts between domestic and international economic policy objectives.

Prerequisite: 444.602 (Macroeconomic Theory and Policy); Corequisite: 440.606 (Econometrics).

Course Goals and Learning Objectives

International Macroeconomics is one of the most sophisticated fields in the discipline of Economics. As such, being professionally functional in this field requires drawing on a wide variety of tools including:

- Higher level mathematics (I assume you remember at least broadly the material from Math Methods for Economists 440.304 or the equivalent, which is material we will be building on; **that said, if you don't remember anything it's not terrible because I start up the class with a thorough math review that will make you superbly comfortable with all the math you will need for this class**);
- Econometrics (Econometrics 440.606 is a corequisite, so **no prior knowledge is**

assumed nor required: I will teach you everything you need to know for the purposes of this class which, of course, is not the entirety of econometrics!).
- And computational analysis (**no prior knowledge of the software we will be using is assumed or required**).

In particular the course requires use of multivariate calculus, intertemporal optimization, matrix algebra, Macroeconometrics, and the softwares Matlab (a matrix algebra program), Dynare (a program for simulating dynamic stochastic general equilibrium models that operates via Matlab), and Stata (a statistical analysis program). These software are jointly the most widely used in the analysis of modern Macroeconomics and International Macroeconomics in the private and public sectors as well as in academic research.

As hinted at above I will be teaching you everything you need to know from the ground up, meaning that the course is self-contained and I pretty much assume no prior knowledge (even if you have it) of any of the above-noted topics. Importantly, no prior knowledge of intertemporal optimization, macroeconometrics, or of any of the noted software is required. **All that is required on your part is willingness and enthusiasm for learning.**

By the end of this course, you will be able to:
- Assess exchange rates and their relationship with foreign exchange markets transactions and arbitrage conditions.
- Determine the long- and short-run links between prices, inflation, the money supply, real income, and interest rates.
- Evaluate national income and product accounts as well as the balance of payments account.
- Appraise the benefits and costs stemming from financial openness.
- Apply judgement to the application of economic policy in open economy frameworks.
- Implement the mathematical tools of intertemporal optimization and the statistical tools of macroeconometrics to the analysis of International Macroeconomics.
- Use Dynare, Matlab, and Stata for International Macroeconomic analysis and, in particular, for the analysis of open-economy dynamic stochastic general equilibrium models.

Section 2
Course Materials

Textbook

Required: *International Macroeconomics*, by Robert C. Feenstra and Alan M. Taylor, 3rd edition or higher (note: eTextbook is available from select sellers). This is "half" of a larger version of this textbook that encompasses both International Trade and International Macroeconomics that is by the same authors and is called *International Economics*. You are welcome to purchase this larger version of the textbook if you prefer. In addition, make sure to compare pricing options because sometimes the "half" version is not much cheaper than the "full" version.

Other Readings

Required: lecture notes (available on the course website). When necessary, these notes will build on the textbook foundations by elevating the contents to the mathematical and analytical sophistication proper of a graduate level course (in particular, this course will make extensive use of calculus). **As such, understanding the textbook contents is necessary but by no means sufficient for doing well in this class.**

Software

This class will make moderate use of Stata and heavy use of Dynare and Matlab.

- *The University offers two ways through which you can gain access to Stata*:

    Stata is available from JHU via the MyJLab virtual lab.

    This link shows the list of all available software from the **MyJLab** virtual lab.

    http://studentaffairs.jhu.edu/computing/computing-on-campus/computer-lab/available-software/

    Students must use the **JHU VPN** service to connect to MyJlab from off campus. This link provides instructions on how to use the **JHPulse VPN** service.

    https://portalcontent.johnshopkins.edu/JHPulse/index.html

    This link provides instructions on how to connect to **MyJLab**. You have to download and install a CITRIX RECEIVER client software first.

    http://studentaffairs.jhu.edu/computing/computing-on-campus/computer-lab/myjlab/

    Stata is available for purchase via the Stata Campus GradPlan™

    If you decide to purchase Stata, going with the IC version is more than sufficient for the work we will be doing in class. (*Note: I am able to provide technical assistance for purchased versions of Stata but not so for the MyJLab version.*)

- *The University offers Matlab for free.* Go to https://my.jh.edu/portal/web/jhupub/ and log in; from the menu on the left-hand side select Technology and then click on mySoftware; click on the Software Catalogue link that you are referred to; in the search bar that follows type in Matlab; follow the instructions to download.

- *Dynare is free.* Go to http://www.dynare.org/ and click on download; select the stable release and follow the instructions to download.

Specific Technology Requirements and Skills for this Course

Learning online requires some basic knowledge of computer technology. At a minimum, you need to be able to:

- Navigate in and use Blackboard; the Blackboard Student Orientation course on your "My Institution" page;
- Create and save MS Word documents; see MS Word training and tutorials for PC users (all versions); Word Help for Mac users;
- Find basic resources on the Internet;
- Create and organize files & folders on your computer;
- Send, receive, and manage email;
- Have access to a scanner or scanning app in order to be able to submit assignments in .pdf format.

Section 3

About this Course

Course Topics

- Lesson 1 (encompasses Week 1 and Week 2 of the class, and therefore—see below—Discussion 1 and Discussion 2 of the class: August 28 – September 10): **the Global Macroeconomy; Mathematical Foundations; Sovereign Default**.

- Lesson 2 (encompasses Week 3 and Week 4 of the class, and therefore—see below—Discussion 3 and Discussion 4 of the class: September 11 – 24): **Matrix Algebra; Introduction to Matlab; Exchange Rates and the Foreign Exchange Market**.

- Lesson 3 (encompasses Week 5 and Week 6 of the class, and therefore—see below—Discussion 5 and Discussion 6 of the class: September 25 – October 8): **Macroeconometrics and Stata; National and International Accounts; the Gains from Financial Globalization.**

- Lesson 4 (encompasses Week 7 of the class, only, and therefore—see below—Discussion 7 of the class, only: October 9 – 15): **Exam 1**.

- Lesson 5 (encompasses Week 8 and Week 9 of the class, and therefore—see below—Discussion 8 and Discussion 9 of the class: October 16 – 29): The Monetary Approach to International Macroeconomics; **Closed Economy Real Business Cycle Models; Analytical Steady States; Analytical Steady States; Introduction to Dynare; Matlab Applications; Stata Applications.**

- Lesson 6 (encompasses Week 10 and Week 11 of the class, and therefore—see below—Discussion 10 and Discussion 11 of the class: October 30 – November 12): **The Asset Approach to International Macroeconomics; Intertemporal Trade and the Current Account; Computational Steady States; Uses of Dynare and Matlab for Simulating and Analyzing Dynamic Stochastic Closed Economy General Equilibrium Models; Stata Applications.**

- Lesson 7 (encompasses Week 12 and Week 13 of the class, and therefore—see below—Discussion 12 and Discussion 13 of the class: November 13 – December 3): **Open-Economy Macroeconomic Policy; Open Economy Real Business Cycle Models; Uses of Dynare and Matlab for Simulating and Analyzing Dynamic Stochastic Open Economy General Equilibrium Models; Stata Applications.**

- Lesson 8 (encompasses Week 14 of the class, only, and therefore—see below—Discussion 14 of the class, only: December 4 – 10): **Exam 2**.

Directions for Students

First Step: Carefully review the remaining sections of the syllabus. Then, start up with the **Lesson 1** activities, which are located in the **Lessons** folder in your online course.

- Once you feel that you are ready to dive into the first week's activities, click on the **Lessons** button on the left-side navigation menu. Then, click on **Lesson 1** to begin.
- **NOTE: Lessons will be posted on a rolling basis and will therefore become available on the first day of each relevant week of classes (see schedule below).**

Section 4
Assessments and Grading Policy

Assignments

Assignment	Due Date	Percentage Points
Lesson-1 Homework	September 10th at 11:59 pm Eastern Standard time	8
Lesson-2 Homework	September 24th at 11:59 pm Eastern Standard Time	8
Lesson-3 Homework	October 8th at 11:59 pm Eastern Standard Time	8
Exam 1 (covers materials from Lessons 1 through 3)	October 15th at 11:59 pm Eastern Standard Time (the exam is timed and you will have 5 hours to complete it as of the time you choose to begin)	22
Lesson-5 Homework	October 29th at 11:59 pm Eastern Standard Time	8
Lesson-6 Homework	November 12th at 11:59 pm Eastern Standard Time	8
Lesson-7 Homework	December 3rd at 11:59 pm Eastern Standard Time	8
Exam 2 (covers material from Lessons 5 through 7, only, so not explicitly cumulative; however, you will not be able to solve the exam without knowledge of all of the material building up to it)	December 10th at 11:59 pm Eastern Standard Time (the exam is timed and you will have 5 hours to complete it as of the time you choose to begin)	22
Course Engagement You are required to participate in course discussions.	14 total discussions each worth 1.12 percentage points; see below for details.	8
Total		100

Grading

Each homework and exam is worth 100 points total. Each discussion is worth 100 points total, and your final discussion grade will be equal to the simple average of your 14 online discussion grades. As such, your **final numerical grade** in the class can sum up to 100 points, maximum, and is equal to the following weighted sum:

0.08*(Lesson-1 Homework grade)

+ 0.08*(Lesson-2 Homework grade)

+ 0.08*(Lesson-3 Homework grade)

+ 0.22*(Exam-1 grade)

+ 0.08*(Lesson-5 Homework grade)

+ 0.08*(Lesson-6 Homework grade)

+ 0.08*(Lesson-7 Homework grade)

+ 0.22*(Exam-2 grade)

+ 0.08*(simple average of 14 discussion grades).

Grading rubric for discussions:

- 86-100 points. Applies critical analytical thinking within the discipline of Economics to the discussion in a way that is original and that constructively moves the discussion forward.
- 61-85 points. Clarifies or seeks clarification of ideas that have already been expressed in a way that is not completely original.
- 46-60 points. Attempts to apply critical analytical thinking within the discipline of Economics, but in a way that does not quite get it right.
- 20-45 points. Makes a casual observation that someone outside the discipline of Economics could have made, but that does not contribute at least marginally to the discussion.
- Between 10 and 19 points.
   - Makes a casual observation that someone completely unfamiliar with the discipline of Economics could have made and that is very unlikely to add to anyone's understanding of the issue at hand.
   - Rehashes ideas that have already been well-established in a way that adds little or nothing of value to the discussion.
   - Misses the point of the question/discussion/topic at hand.
   - Introduces confusion into the discussion in a way that is counterproductive.
- Between 1 and 9 points.
   - Exposition is so unclear that people cannot be sure what is being said after rereading the comment.
   - Exposition is comprehensible, but marred by multiple fundamental typos and/or grammatical errors that are beneath the dignity of a professional Masters degree program.
   - Comment is padded with unnecessary verbiage that obscures the essential point.
   - Comment's reasoning is marred by faulty logic and/or factual inaccuracies.
   - Comment is overly long multi-paragraph essay, making multiple points rather than a single focused contribution to the discussion.
- 0 points. No timely participation, trolling, or inappropriate comments for a professional environment. Or, comment is clearly made with the intention of getting credit, only, and as such completely lacks relevant and/or appropriate content (avoiding this situation is easy: you need to be on top of the material and engaged in class).

Notes on Curving and Conversion to Letter Grades

No letter grades will be given for individual assignments. The only letter grade that you will receive will be that for your final grade in the course. I will curve **final numerical scores** (see above) so that they map into **total effective points** (see below) in a way that the final average grade in the class is a B+.

Letter Grade	Effective Points
A+	98 to 100
A	94 and less than 98
A-	90 and less than 94
B+	88 and less than 90
B	84 and less than 88
B-	80 and less than 84
C	70 and less than 80
F	0 and less than 70

Assignment Guidelines

How should assignments be submitted?

All exam and homework solutions should be submitted via Blackboard.

When will assignments be due?

Assignment and activity due dates are listed in this syllabus and the weekly checklists. I will notify you of any changes via an announcement in your online classroom.

When will completed assignments be returned?

I will aim to return assignments to you within seven days following the due date. You will receive feedback under the My Grades link in the left-hand menu of your course.

What is the policy for late assignments?

You should contact me in advance if you think you cannot meet an assignment deadline. However, if an assignment is late and you have not made prior arrangements with the me regarding this situation the assignment score will be zero. Both anticipated and unanticipated late assignments will only be accepted given a reasonable and documented excuse, such as a health or work issue.

Time Management Expectations

Because this is a graduate-level course (and an advanced elective) that is offered in a condensed format, the rigor and time commitment is much higher than a traditional 14-week semester course. It is expected that you look ahead to schedule your time. Plan to complete coursework across several days of the week rather than all in one day. Be sure to consider how group activities impact your schedule as well.

Be sure to review the assignment directions at the beginning of the course so that you can plan your time accordingly. Please seek help before becoming frustrated and spending a significant amount of time to resolve any one issue that may come up.

Section 5
Course Communication Policy

Network Etiquette (i.e. "Netiquette")

In all textual online communication it's important to follow proper rules of netiquette.

What is netiquette? Simply stated, it's network etiquette—that is, the etiquette of cyberspace. And "etiquette" means the social and cultural norms of communicating with others in a proper and respectful way. In other words, netiquette is a set of rules for behaving and interacting properly online.

The Netiquette "Core Rules" linked below are a set of general guidelines for cyberspace behavior. They probably won't cover all situations, but they should give you some basic principles to use in communicating online.

For Netiquette Core Rules visit The Core Rules of Netiquette web page.

Contacting the Instructor

The professor for this course is Brendan Epstein (bepstei7@jhu.edu).
Feel free to contact your professor with any comments, questions, or concerns you may have. You will receive a response within 24-72 hours.

All email messages will be sent to you via your JHU email account, so you should be in the habit of checking that account every day or you should ensure that your JHU email account properly forwards messages to another account of your choice.

Section 6

Course Protocols

How will you know about changes to the course?

Frequently, you will find new messages posted in the Announcements, which contain information about current course activities that you are working on and any changes to the course. Please check announcements every time that you log into your online course.

How should you communicate with others in this course?

You should communicate as often as you like with your classmates and with your professor. The majority of communication will take place within the Discussion forums. If you want to discuss something with your classmates, please post the communication you wish to engage in with others in the Discussion form titled "Communication Between Students."

Are there any requirements for sending e-mail messages?

When you send an e-mail message to the instructor or to another participant in the course, please observe the following guidelines:

- Include the title of the course in the subject field (e.g., JHU International Finance).
- Keep messages concise, and check spelling and grammar.
- Send longer messages as attachments.
- Sign your full name (the sender's email is not always obvious).

Section 7
Course Topics, Activities and Schedule

Tentative Course Schedule

Important Note: Activity and assignment details will be explained in detail within each week's corresponding learning module. If you have any questions, please contact your instructor.

Lesson	Dates	Topics	Activities	Assessments & Due Dates
1	August 18 – September 10 (encompasses Week 1 and Week 2 of the course).	The Global Macroeconomy; Mathematical Foundations; Sovereign Default.	Listen to the (Panopto) podcast. Read Feenstra and Taylor, chapter 1: "The Global Macroeconomy." Read Feenstra and Taylor, section 3 ("Debt and Default"), only, from chapter 11 ("Topics in International Macroeconomics.") Read the Lesson-1 lecture notes. Submit Homework 1. Participate in Discussion 1. Participate in Discussion 2.	Participate in Discussions 1 and 2 by September 10 at 11:59 pm Eastern Standard Time. Submit Lesson-1 Homework by September 10 at 11:59 pm Eastern Standard Time.
2	September 11 – 24 (encompasses Week 3 and Week 4 of the course).	Matrix Algebra; Introduction to Matlab; Exchange Rates and the Foreign Exchange Market.	Read Feenstra and Taylor, chapter 2: "Introduction to Exchange Rates and the Foreign Exchange Market." Read the Lesson-2 lecture notes. Submit Homework 2. Participate in Discussion 3. Participate in Discussion 4.	Participate in Discussions 3 and 4 by September 24 at 11:59 pm Eastern Standard Time. Submit Lesson-2 Homework 2 by September 24 at 11:59 pm Eastern Standard Time.
3	September 25 – October 8 (encompasses Week 5 and Week 6 of the course).	Macroeconometrics and Stata; National and International Accounts; The Gains from Financial Integration.	Read Feenstra and Taylor, chapter 5: "National and International Accounts: Income, Wealth, and the Balance of Payments." Read Feenstra and Taylor, chapter 6: "Balance of Payments I: The Gains from Financial Globalization."	Participate in Discussions 5 and 6 by October 8 at 11:59 pm Eastern Standard Time. Submit Lesson-3 Homework by October 8 at 11:59 pm Eastern

				Standard Time.
			Read the Lesson-3 lecture notes. Submit Homework 3. Participate in Discussion 5. Participate in Discussion 6.	
4	October 9 – 15 (encompasses Week 7 of the course, only).	Review Period and Exam 1.	Interaction with professor as needed on a case by case basis to brush up on all topics covered in the course. Participate in Discussion 7.	Submit solutions to Exam 1 by October 15 11:59 pm Eastern Standard Time (the exam is timed and you will have 5 hours to complete it as of the time you choose to begin). Participate in Discussion 7 by October 15 at 11:59 pm Eastern Standard Time.
5	October 16 – 29 (encompasses Week 8 and Week 9 of the course).	The Monetary Approach to International Macroeconomics; Closed Economy Real Business Cycle Models; Analytical Steady States; Introduction to Dynare; Matlab applications; Stata applications.	Read Feenstra and Taylor, chapter 3: "Exchange Rates I: The Monetary Approach in the Long Run." Read the Lesson-5 lecture notes. Submit Homework 4. Participate in Discussion 8. Participate in Discussion 9.	Participate in Discussions 8 and 9 by July 4 at 11:59 pm Eastern Standard Time. Submit Lesson-5 Homework by October 29 at 11:59 pm Eastern Standard Time.
6	October 30 – November 12 (encompasses Week 10 and Week 11 of the course).	The Asset Approach to International Macroeconomics; Intertemporal Trade and the Current	Read Feenstra and Taylor, chapter 4: "Exchange Rates II: The Asset Approach in the Short Run." Read the Lesson-6 lecture notes.	Participate in Discussion 10 and 11 by November 12 at 11:59 pm Eastern Standard Time.

		Account; Computational Steady States. Uses of Dynare and Matlab for Simulating and Analyzing Dynamic Stochastic Closed Economy General Equilibrium Models; Stata Applications.	Submit Homework 5. Participate in Discussion 10. Participate in Discussion 11.	Submit Lesson-6 Homework by November 12 at 11:59 pm Eastern Standard Time.
7	November 13 – December 3 (encompasses Week 12 and Week 13 of the course).	Open-Economy Macroeconomic Policy; Open Economy Real Business Cycle Models. Uses of Dynare and Matlab for Simulating and Analyzing Dynamic Stochastic Open Economy General Equilibrium Models; Stata Applications.	Read Feenstra and Taylor, chapter 7: "Balance of Payments II: Output, Exchange Rates, and Macroeconomic Policies in the Short Run." Read the Lesson-7 lecture notes. Submit Homework 6. Participate in Discussion 12. Participate in Discussion 13.	Participate in Discussions 12 and 13 by December 3 at 11:59 pm Eastern Standard Time. Submit Lesson-7 Homework by August 8 at 11:59 pm Eastern Standard Time.
8	December 4 – December 10 (encompasses Week 14 of the course, only).	Review Period and Exam 2.	Interaction with professor as needed on a case by case basis to brush up on all topics covered in the course. Participate in Discussion 14.	Submit solutions to Exam 2 by December 10 at 11:59 pm Eastern Standard Time (the exam is timed and you will have 5 hours to complete it as of the time you choose to begin). Participate in Discussion 14 by December 10 at 11:59 pm Eastern Standard Time.

Section 8
University Policies

General

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies.

Students with Disabilities

Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact the coordinator listed on the Disability Accommodations page. Further information and a link to the Student Request for Accommodation form can also be found on the Disability Accommodations page.

Ethics and Plagiarism

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Read and adhere to JHU's Notice on Plagiarism.

Dropping the Course

You are responsible for understanding the university's policies and procedures regarding withdrawing from courses found in the current catalog. You should be aware of the current deadlines according to the Academic Calendar.

Getting Help

You have a variety of methods to get help on Blackboard. Please consult the resource listed in the "Blackboard Help" link for important information. If you encounter technical difficulty in completing or submitting any online assessment, please immediately contact the designated help desk listed on the AAP online support page. Also, contact your instructor at the email address listed in the syllabus.

Copyright Policy

All course material are the property of JHU and are to be used for the student's individual academic purpose only. Any dissemination, copying, reproducing, modification, displaying, or transmitting of any course material content for any other purpose is prohibited, will be considered misconduct under the JHU Copyright Compliance Policy, and may be cause for disciplinary action. In addition, encouraging academic dishonesty or cheating by distributing information about course materials or assignments which would give an unfair advantage to others may violate AAP's Code of Conduct and the University's Student Conduct Code. Specifically, recordings, course materials, and lecture notes may not be exchanged or distributed for commercial purposes, for compensation, or for any purpose other than use by students enrolled in the class. Other distributions of such materials by students may be deemed to violate the above University policies and be subject to disciplinary action.

Code of Conduct

To better support all students, the Johns Hopkins University non-academic Student Conduct Code has been integrated and updated to include all divisions of the University. In addition, it is important to note that all AAP students are still accountable for the Code of Conduct for Advanced Academic

[Programs](#).

Title IX

Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe and inclusive learning environment on our campus. I also have mandatory reporting responsibilities related to my role as a Responsible Employee under the Sexual Misconduct Policy & Procedures (which prohibits sexual harassment, sexual assault, relationship violence and stalking), as well as the General Anti-Harassment Policy (which prohibits all types of protected status based discrimination and harassment). It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share information that I learn of regarding sexual misconduct, as well as protected status based harassment and discrimination, with the Office of Institutional Equity (OIE). For a list of individuals/offices who can speak with you confidentially, please see Appendix B of the [JHU Sexual Misconduct Policies and Laws.](#)

For more information on both policies mentioned above, please see: [JHU Relevant Policies, Codes, Statements and Principles.](#) Please also note that certain faculty and other University community members also have a duty as a designated Campus Safety Authority under the Clery Act to notify campus security of certain crimes, as well as a duty under State law and University policy to report suspected child abuse and/or neglect.