THE NATURE AND FUNCTIONING OF THE INTERNATIONAL MONETARY SYSTEM

The undergraduate version of this course at the University of Toronto is Eco419H and the graduate version is Eco4050H. The first meeting in Fall 2014 was in the room LA248 on Tuesday Sept. 9 from 11:00AM to 1:00PM. The course will be offered in Fall 2015. The final exam for fall 2014 was held on Wednesday Dec. 17th between 7:00PM and 10:00PM in room BA2139. The class will be offered again in the Fall term of 2016 and the first meeting will be on the first Tuesday of the Term between 11:00AM and 1:00PM in a room to be noted later. The first meeting in Fall 2015 will be in room LA248 (that is, Larkin 248) between 11:00AM and 1:00PM on September 7, the first Tuesday of the Term.

My office is Rm 342 in Max Gluskin House and my office phone number is 416-746-7974. My cell phone number is 416-992-5143 and my home phone number is 416-769-8245.

General Description of the Course

The objectives of this course are to help students develop a basic understanding of how the international monetary system functions and how macroeconomic policy is conducted in individual countries embedded in that system. Analytical tools are developed to critically evaluate public policy arguments and comments appearing in the popular press. An introduction to the methodology and techniques of current research in the field is provided and students will develop their ability to read critically some of the professional literature. All this requires the establishment of an analytical framework into which current and historical issues in theory and policy can be placed. Building this framework is the central focus of the course.

I have written some elementary computer-assisted study modules that are assigned in the course. Past experience indicates that students who have done previous work in macroeconomics at an advanced level, or who have taken a third year international macroeconomics course, do not take these modules seriously, figuring that they already know the material. That is a big mistake! My experience is that even quite advanced students do not really understand the material they have taken in previous courses. One reason for this is that macroeconomics courses differ in organization and content so that students entering this class will have specific views of what macroeconomics is about that differ both from student to student and from the approach taken here. As a result students are typically unable to deal with questions posed in different ways than that to which they are accustomed. A second reason is that students' primary objective is often to get an appropriate grade in a course rather than learn the material, so they tend to learn just what is necessary to be able to put the "right things" down on the final exam. Figuring out what might be asked on the final exam and memorising the answers is quite different than learning the fundamentals of a subject. A third reason is that international macroeconomics is a difficult subject and it takes several courses before students begin to understand the fundamentals. The fundamentals are the *sine qua non* for understanding what is going on in this field. Every model has to be based on and relate properly to these fundamentals if it is to be of any use---students who understand mathematical models but not the fundamentals on which they are based have no useful knowledge of macroeconomics. On the other hand, students who understand the fundamentals and have the proper mathematics background can easily construct and evaluate models that deal with specific questions as they arise. The basic objective here is to teach students the fundamentals. These are completely contained at the simplest level in the computer-assisted learning modules. Advanced topic write-ups are also assigned to get students to the point where they have a more sophisticated understanding of the material in the modules and more fully understand the theoretical foundations of that material. Students should therefore take the computer modules very seriously, and also work very carefully through the advanced topic presentations, because they will not get a decent grade in this course without understanding the material there contained. Students should also work through the assignment material that will refresh their understanding of basic economics and mathematics and statistics and become familiar with procedures and computational methods used to do statistical work.

The basic theory presented in this course is discussed in detail in my book entitled *Interest Rates, Exchange Rates and World Monetary Policy*, published in 2010 by Springer -Verlag in Heidelberg Germany, and available on loan from

Robarts Library at the University of Toronto. The Advanced Topic Handout .pdf file presentations contain everything in the book of importance so there is no reason for students to feel they should purchase it.

Implementation of the Course

This course is fundamentally a reading course and will be made available, depending upon my medical condition, at a particular instructor participation level announced at the beginning of each term. Five levels of intstructor participation are possible.

IP0 -- Zero Instructor Participation

At the very minimum, students can work through the material and learn on their own, each ending up with a level of understanding that will depend on the magnitude of their effort. The course is available not only to graduate and undergraduate students at the University of Toronto, but to students anywhere in the world provided that they are connected to the internet. University of Toronto students, while free to study the material, cannot enrol at this level because there will be no final exam and, hence, no possibility of obtaining university credit.

IP1 -- Level 1 Instructor Participation

The minimal positive level of instructor participipation involves, in addition to the above, the setting of a final exam to open up the possibility that students can obtain evidence as to their degree of learning and, possibly, course credit. University of Toronto students can therefore enrol at the undergraduate or graduate level and obtain a grade and appropriate university credit for their efforts. Students outside the country can only obtain university credit if they can persuade the economics department at their local university to give them credit for an appropriately-named course based on their performance on a final exam that I will provide and that must be supervised within the student's local university.

IP2 -- Level 2 Instructor Participation

A slightly higher level of intstructor participation will involve grading of the four assignments and the assignment of grades out of 10 points for each. The assignments will then count for 40 percent of the final grade and the final exam will count for the remaining 60 percent.

IP3 -- Level 3 Instructor Participation

In addition to grading of the four assignments, this higher degree of instructor participation involves arranging, for each assignment, a one-and-one-half-hour one-on-one tutorial with each student in my office or by skype to go over and discuss in detail the students' answers to the assignment. For students outside the University of Toronto, and those U. of T. students who might choose, these tutorials can be arranged through Skype.

IP4 -- Level 4 Instructor Participation

Additional instructor participation can be added by meeting with all students in a two-hour class session once a week during the term in which students will have the opportunity to ask the instructor questions about the material in the course. These class sessions can be arranged through Skype for students outside the University of Toronto.

IP5 -- Level 5 Instructor Participation

This highest level of instructor participation involves, in addition to the above, availability of the instructor via. office

hours either in my office for University of Toronto students, or via. Skype for outside students as well as those U. of T. students who choose. I will also be available to provide e-mail answers student questions asked over the web and will make myself available on Skype for a few hours per week for individual-student questions to achieve this highest level of participation.

In the fall 2014 term I am participating at Level 5 with tutorials, class times on Tuesdays between 11:00AM and 1:00PM, and office hours any day via. Skype if arranged in advance by e-mail. I will send every student an email if I need to change the nature of this participation. It should be noted that all my participation is available to students everywhere without charge. The only cost of this course to students is university fees for enrolment and examination supervision.

I am available via email. My email address is

floyd@chass.utoronto.ca

Enrollment and Other Requirements

An undergraduate (ec419H) and graduate (ec4050H) version of this course will be available to University of Toronto students in the Fall 2014 and Spring 2015 semesters. Undergraduates must obtain my permission to enrol. I will decide who can enrol by looking at their grades in relevant previous courses. To do this, I will need your student number. I will look up and carefully examine your grade record and make a decision as to whether to allow you to enrol. I will then inform both you and Jenny Fan (room 134) of my decison. Upon your subsequent request via e-mail to (jenfan@chass.utoronto.ca), which you should make by the end of August, Jenny will enrol you in the course if my permission has been granted. Because four one-and-one-half-hour one-on-one tutorials with me will be assigned to each and every undergraduate student, the total Eco419H enrollment is capped at 15. The first 15 University of Toronto undergraduate students who enrol get the available positions. Some late enrollments will be possible to the extent that some of the initial 15 enrolling students drop out. Students outside the U. of T. can begin study at any time during the year without my permission, although they should send me their e-mail and Skype addresses and inform me that they are going to work through the course. As the course is very demanding, those without any initial understanding of the subject matter should spread the course out over a full year and, if possible, access my examination procedure when they are ready.

Additional Within-Course-Information

The students enrolled in the fall-term of 2014 should join together in single group for subsequent class sessions in which I am available to answer questions. The next class session will be on Tuesday October 14 beween 11:00AM and 1:00PM. Subsequent sessions will take place on all remaining Tuesdays at the above time for the remainder of the term.

Class List:
Menglu Cai --- menglu.cai@mail.utoronto.ca
Anas Motiwala --- anas.motiwala@mail.utoronto.ca
Joshua Margulies --- joshua.margulies@sciencespo.fr
Michal Staszewski --- m.staszewski@mail.utoronto.ca

The fall-term 2014 hand-in dates for students' written answers to the Review Question Assignments and the corresponding one-on-one-tutorial dates are listed below. I will hold office hours and class sessions in my office on the Tuesdays between 11:00AM and 1:00PM. Students who cannot meet at the times assigned below should contact me to have their meeting time moved to one of the open positions.

First Assignment:
Due Date: Monday Sept. 29
Tutorial Dates:
Mon. Oct. 6 -- 10:00AM - 11:30AM --- Open

Mon. Oct. 6 -- 3:30PM - 5:00PM --- Open
Tues. Oct. 7 --1:00PM - 2:30PM --- Michael Staszewski
Wed. Oct. 8 -- 12:30PM - 2:00PM --- Joshua Margulies
Wed. Oct. 8 -- 2:00PM - 3:30PM --- Open
Fri. Oct. 10 -- 10:00AM - 11:30AM --- Menglu Cai
Fri. Oct. 10 -- 11:45AM - 1:15PM --- Anas Motiwala

Second Assignment:
Due Date: Monday Oct. 20
Tutorial Dates:
Mon. Oct. 27 -- 10:00AM - 11:30AM --- Open
Mon. Oct. 27 -- 3:30PM - 5:00PM --- Open
Tues. Oct. 28 -- 1:00PM - 2:30PM --- Michael Staszewski
Wed. Oct. 29 -- 10:00AM - 11:30AM --- Open
Wed. Oct. 29 -- 12:30PM - 2:00PM --- Open
Wed. Oct. 29 -- 2:00PM - 3:30PM --- Open
Thurs. Oct. 30 -- 10:00AM - 11:30Am --- Anas Motiwala
Thurs. Oct. 30 -- 12:30AM - 2:00PM --- Menglu Cai
Mon. Nov. 3 -- 1:00PM - 2:30PM -- Anas Motiwala
Mon. Nov. 3 -- 2:30PM - 4:00PM -- Joshua Margulies

Third Assignment:
Due Date: Monday Nov. 10
Tutorial Dates:
Mon. Nov. 17 -- 10:00AM - 11:30AM --- Open
Mon. Nov. 17 -- 3:30PM - 5:00PM --- Open
Tues. Nov. 18 -- 1:00PM - 2:30PM --- Michael Staszewski
Wed. Nov. 19 -- 10:00AM - 11:30AM --- Open
Wed. Nov. 19 -- 12:30PM - 2:00PM --- Joshua Margulies
Wed. Nov. 19 -- 2:00PM - 3:30PM --- Open
Thurs. Nov. 20 -- 10:00AM - 11:30Am --- Anas Motiwala
Thurs. Nov. 20 -- 12:30AM - 2:00PM --- Menglu Cai

Fourth Assignment:
Due Date: Monday Nov. 24
Tutorial Dates:
Tues. Nov. 25 -- 1:00PM - 2:30PM --- Open
Wed. Nov. 26 -- 10:00AM - 11:30AM --- Open
Wed. Nov. 26 -- 12:30PM - 2:00PM --- Open
Wed. Nov. 26 -- 3:30PM - 5:00PM --- Open
Thur. Nov. 27 -- 10:00AM - 11:30AM --- Open
Thur. Nov. 27 -- 12:30PM - 2:00PM --- Open
Thur. Nov. 27 -- 2:00PM - 3:30PM --- Open
Thurs. Nov. 27 -- 3:30PM - 5:00PM --- Open
Mon. Dec. 1 -- 12:30AM - 2:00PM --- Anas Motiwala
Mon. Dec. 1 -- 4:00PM - 5:30PM --- Joshua Margulies
Tues. Dec. 2 -- 1:00PM - 2:30PM --- Michal Staszewski

All students should have met with me in my office at 10AM on Tuesday of the first week of classes so we can decide, based on the size of the class, where to hold the class sessions. Please bring your answers to the assignments (in printed form) to my office on the relevant due dates or send copies to me by web-mail. Since, in many cases the number of questions is large, your answer to each question should be short, containing the simplest and shortest explanation of the economics principles involved. Available dates for one-on-one-tutorials, based on the ones noted above, can be altered via e-mail contact from students with satisfactory dates selected by mutual agreement. A grade out of 10 points will be

awarded for each assignment at the end of the corresponding tutorial, based on my evaluation of the student's understanding of the material. Failure to hand in the written answers and/or to show up for the tutorial will result in a zero grade out of ten.

For questions, discussion and tutorial-time arrangements, e-mail me at floyd@chass.utoronto.ca.

COURSE MATERIAL

The material is divided into four parts, each of which should take one-quarter of students' total study time for the course, although students with poor background may have to spend additional effort on the first part.

PART I

Economics Background Review--HTML Lession Modules

General
1. Dimensions of Economic Activity
2. Political Economy

Microeconomics
1. Supply and Demand
2. Rents and Externalities
3. Additional Topics

Macroeconomics
1. Interest Rates and Asset Values
2. Money, Inflation and Output
3. Interest Rates and Growth
4. Unemployment

Math and Statistics Review

Mathematics Review for Economists

To build up your understanding of basic math, work through the following material Jack Johnston and John DiNardo, *Econometric Methods*. McGraw Hill 1997: Appendix A, pp. 453-467 (To end of section A2.7), Appendix B, pp 485-490 (To the end of section B4) and Chapter 3, section 3.1, pp. 69-76, and section 3.4, pp. 86-98 (skip subsection 3.4.4)

Basic Statistics Review for Economics Students

Students who need a more elementary statistics review should work through the document Statistics for Economists: A Beginning

Students doing statistical analysis may need to review some free software that they can use. To learn some basics of three good programs they should work through Statistical Analysis using XLispstat, R, and Gretl: A Beginning

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Students' Answers to the First Set of Review Questions, dealing with the underlying Economics Basics and the required understanding of Mathematics and Statistics should now be handed in at this point.
The best procedure is to download and print out each assignment, clicking on this text to

obtain Assignment 1, before starting your work on the relevant material, and construct answers as you work through the course material. When all the questions have been dealt with, download the next assignment and proceed in the same way. The data file to be used in this exercise is causqdat.xls Click on the above file-name to download the file.

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PART II:

Fundemental HTML International Macroeconomics Lession Modules

Before starting these lessons, it will be worthwhile for you to read

Bennett T. McCallum, *International Monetary Economics* , Chapter 2, Exchange Rate Concepts, pp. 14-42.

1. Asset Markets
2. The Foreign Exchange Market
3. Small Open Economy Equilibrium I: The Balance of Payments and the Exchange Rate
4. Small Open Economy Equilibrium II: Monetary Policy Under Flexible Exchange Rates
5. Small Open Economy Equilibrium III: Monetary Policy Under Fixed Exchange rates
6. Small Open Economy Equilibrium IV: Fiscal Policy
7. Big Open Economy Equilibrium

Before proceding further, you should develop your understanding of the effects of United States monetary policy in the rest of the world by working through International Effects of United States Monetary Policy

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Advanced Topic Presentations: Intertemporal Foundations

1. Intertemporal Foundations I

2. Intertemporal Foundations II

Advanced Topic Presentation: Monetary and Real Shocks and Balance of Payments Equilibrium

Monetary and Real Shocks and Balance of Payments Equilibrium

A Further HTML Lesson Module

8. Additional Policy Issues

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Students' Answers to the Second Set of Review Questions should now be handed in and a one-on-one tutorial arranged. Click here to obtain the assignment.

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PART III:

The Gold Standard

At this point students should develop their understanding of balance of payments adjustment under the internatational gold standard by working through the following journal article

Trevor J. O. Dick and John E. Floyd, "Balance of Payments Adjustment under the International Gold Standard: Canada, 1871-1913", *Explorations in Economic History*, 28, 1991, 209-238.

Advanced Topic Presentations: Real Exchange Rate Determination

1. Advanced Presentation: Exchange Rate Determination I

The discussion here refers to and analyzes forces determining real exchange rates, and statistical issues regarding real exchange rates as potentially random walks, dealing with power of test, and failure of purchasing-power-parity.

To acquire the necessary background related to stationarity of time series and spurious regression, you should read my two expositional papers Econometrics Basics: Investigating the Stationarity of Time Series and Econometric Basics: Avoiding Spurious Regression. You should also read the expositional paper Econometric Basics: Dealing with Simultaneity Bias.

You should also find it useful to read

Kenneth Rogoff, "The Purchasing Power Parity Puzzle," *The Journal of Economic Literature*, Vol. 34, June 1996, 647-668.

2. Advanced Presentation: Exchange Rate Determination II

The material presented deals with Exchange Rates and Asset Markets. In this respect, the discussion deals with covered and uncovered interest parity, as well as using the current spot and forward exchange rates as forecasts of next-period spot exchange rates. Pages 17-19 deal with Exchange Rate Overshooting.

And to acquire fuller understanding of the empirical work discussed below you should read

- Walter Enders, *Applied Econometric Time Series* , Chapter 4, pp. 211-227 and pp. 233-250.

3. Advanced Presentation: Exchange Rate Determination III

An empirical analysis of the factors determining real exchange rate levels and interest rate differentials.

Broaden your understanding here by working through Jay H. Leven, *A Guide to the Euro*, New York, Houghton Mifflin Company, 2000

and

Michael B, Devereux, "Real Exchange Rates and Macroeconomics: Evidence and Theory," *Canadian Journal of Economics*, Vol., 30, No 4a, 1999, pp 773-787.

4. Advanced Presentation: Exchange Rate Determination IV.

An empirical Analysis of the Relationship between Unanticipated Money Shocks and Real Exchange Rate Levels and Interest Rate Differentials

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Students' Answers to the Third Set of Review Questions should now be handed in for grading. Click here to obtain the Questions. Also you need to download the data for the econometric exercise you will be asked to do. You will need to click on either or both of the Excel and Gretl data files.
Go to the Excel file for descriptions of the variables contained in these two program files. The Excel file can be loaded into the free spreadsheet program Gnumeric. You should then arrange your third tutorial.

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PART IV

More Advanced Topic Presentations: Implications of the Above Analysis

1. Advanced Topic: A Basic Two-Country Model
2. Conducting Monetary Policy

2. Advanced Topic: Conducting Monetary Policy

Finally Students should work through three working papers

Jack L. Carr and John E. Floyd, "Real and Monetary Shocks to the Canadian Dollar: Do Canada and the U.S. Form an Optimum Currency Area". (published in the *North American Journal of Economics and Finance*, Vol. 13, May, 2002, pp.21-39.)

John E. Floyd, "Small-Open-Economy Monetary Policy and Real and Nominal Exchange Rates: The Canadian Case". University of Toronto

John E. Floyd, "Interest Rates, Exchange Rates and Monetary Policy in Great Britain". University of Toronto

as well as through the following published paper

Allan C. Stockman, "Choosing an Exchange Rate System," *Journal of Banking and Finance*, Vol. 23, 1999.

and two chapters in the well-known book by Laidler and Robson,

David E.W. Laidler and William B.P. Robson, *Two Percent Target: Canadian Monetary Policy Since 1991* CD Howe Institute Policy Study 37, July 2004, Chapters 2 and 3.

For an insiders view on monetary policy, you can read John Crow's book *Making Money: An Insider's Perspective on Finance, Politics and Canada's Central Bank*, John Wiley and Sons Canada Ltd., 2002. (John Crow was Governor of the Bank of Canada)

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Students' Answers to the Fourth Set of Review Questions should now be handed in. Click here to obtain these questions. And the fourth tutorial should then be arranged.

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After making sufficiet effort on the above work, you should be prepared for any final exam provided.