

Waiver

Information Guide

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Introduction

The Wharton MBA is designed to help you make the most of your academic experience. For many, this is an opportunity to learn an entirely new skill set. For others, it is a chance to upgrade and update.

■ Not Everyone Waives

Your class will experience a curriculum designed to meet the real-time needs of forward-thinking business leaders. This innovative curriculum builds a customizable foundation in business essentials while providing ample time to explore Wharton's wide array of elective offerings.

The foundation of the curriculum is built around a series of classes referred to as "Core Courses." Please see the MBA Curriculum Snapshot for a full list of the Core classes which can be accessed at https://spike.wharton.upenn.edu/mbaprogram/curriculum/curriculum_snapshot.pdf. Core Course descriptions can be found in the current 2014-2015 *Resource Guide* which can be accessed at https://spike.wharton.upenn.edu/mbaprogram/publications/Res_Guide_2014.pdf (the 2015-2016 *Resource Guide* will be available in May 2015). Many students find that their previous course-work does not cover the subject material addressed in these Core offerings. If that holds true for you, simply select the "decline to waive" options when completing the waiver questionnaire on the SPIKE Waiver Registration page which can be found at <https://spike.wharton.upenn.edu/mbaprogram/index.cfm>.

Taking the entire Core will not put you at a disadvantage. Near 40% of your class will not waive a single course and many who do waive will waive only one subject. (See below for statistics on waivers for the Class of 2016). Additionally, you have choices to make within the context of the Core, allowing you to tailor your educational experience even before registering for elective coursework.

Waiver Statistics for the Class of 2016 (WG'16)

	ACCT		FNCE			MGEC		MKTG		OPIM	STAT	
	611	612	611	612	613	611	612	611	612/613	611	613	621
Waiver by Credential	22	-	-	-	-	-	-	34	30	81	38	-
Waiver by Exam	84	-	22	-	45	149	68	-	-	36	49	-
Placement by Credential	-	20	-	131	-	-	-	-	-	-	-	4
Placement by Exam	-	114	-	93	-	-	-	-	-	-	-	173
Substitution	-	-	-	-	-	-	-	38	10	-	-	-
Total	106	134	22	224	45	149	68	72	40	117	87	177
Not Approved	30		44			13	99	70	7	15	12	6
% Approved	89%		84%			78%	60%	49%	91%	73%	91%	97%
% of Class	27%		28%			5%	17%	8%	8%	5%	14%	21%

■ Sometimes Waivers Make Sense

You may have educational or professional experience that makes some of the material covered in the Core redundant. Provided you can prove your mastery of such material by credential or examination, you have the opportunity to waive related elements from the Core.

This publication outlines each of the Core courses that may be waived and the requirements for waiving. Enclosed you will find abridged syllabi for all of the courses that may be waived. If the content in one of these syllabi looks familiar, consider waiving that course.

■ How to Waive

Beginning in mid-April, you will be asked to complete a waiver questionnaire on the SPIKE Waiver Registration page. Depending upon your responses, it may be recommended that you:

- Submit credentials verifying that you meet the waiver requirements;
- Take a waiver exam; or
- Take the class.

If the waiver questionnaire recommends that you waive a particular course by credential, an application will be made available to you online. If you wish to submit a request to waive by credential, please complete the following steps:

1. Fill out the application (you will need to print it out once you have completed it online);
2. Enclose copies of the material required to waive by credential – these may include a copy of your transcript (please highlight the courses and grades for the subject you are attempting to waive), a syllabus, or a detailed resume;
3. Mail the completed application to the MBA Program Office at:
Wharton MBA Program Office
ATTN: Waiver Coordinator
University of Pennsylvania
300 Jon M. Huntsman Hall
3730 Walnut Street
Philadelphia, PA 19104-6340

OR

Save the petition as an Adobe .pdf, attach .pdf scans of your transcript, syllabi and/or other supporting documentation, and send the completed packet via email to:
mbawaivers@wharton.upenn.edu
(if not in PDF format, your submission will be rejected)

Your application to waive by credential will be forwarded to a member of the faculty for review.

If the questionnaire recommends that you take a waiver exam, please register for that exam through the SPIKE Waiver Registration page. The *Waiver Exam Guide* provides sample questions from several of the waiver exams.

■ Prep Coursework for ACCT, FNCE, and STAT

WEDNESDAY, JULY 29 – FRIDAY, JULY 31

(Please note that these classes take place before the start of Pre-Term.)

These ACCT, FNCE, and STAT classes are the only classroom review offered for waivers. Attendance is not required to take the waiver and placement exams but highly recommended.

ACCT 604: This course is meant for students seeking placement into ACCT 612. ACCT 604 is meant to help qualified students who may need to refresh their knowledge of basic financial accounting concepts. It is not designed for students with little or no previous exposure to accounting.

ACCT 608: This course is designed for students who may be able to waive entirely the accounting requirement but need to refresh their understanding of graduate-level financial accounting concepts. This course is not designed for students with little or no previous exposure to accounting.

FNCE 604: This course is designed for students seeking placement into FNCE 612. FNCE 604 is meant to help qualified students who may need to refresh their knowledge of basic corporate finance concepts. It is not designed for students with little or no previous exposure to corporate finance.

STAT 608: This course is designed for students who wish to review the prerequisite materials for STAT 621 to prepare for the placement exam. It is not designed for students with little or no previous exposure to statistics.

■ Should You Waive?

Advantages include:

- Making room in your schedule for more elective coursework
- Avoiding repetitive coursework

The disadvantages include:

- Missing out on course work that would better prepare you for advanced study in the field
- Less time spent developing relationships with members of your cohort and learning team

■ Waiver Policies

- There are two deadlines for submitting waiver by credential:
 - **Monday, June 1** – results will be returned by Monday, June 15
 - **Monday, July 6** – results will be returned by Monday, July 20

We encourage you to submit your credentials as soon as possible in order to determine if you will need to take the waiver prep courses and exams that take place before Pre-Term. **Credentials will not be accepted after the July 6 deadline.**

- All waiver exams must be completed by **Tuesday, August 4, 2015.**
- To waive by credential, you must meet the stated deadlines. **No credentials will be accepted after Monday, July 6.**
- If you do not meet the requirements to waive a course by credential, you may try to waive the same course by taking the waiver exam in all subjects that offer a waiver by exam, except OPIM 611. For OPIM 611, you can only take the waiver exam if that is recommended.
- You have only one attempt at each waiver exam and are eligible to take them only in the summer preceding your first year at Wharton. If you are unable to waive a Core course by credential and cannot take the waiver exam at the scheduled time, you must take the course.
- There are no make-up waiver exams.
- If the online waiver questionnaire does not recommend you attempt to waive by credential, you may not submit credentials. If you still wish to waive the course, the only way to do so is by taking and passing the waiver exam.
- Students granted waivers for fixed Core courses may still choose to enroll in said courses provided they enroll prior to the close of the add period. To enroll in a waived course, students should contact their academic advisor in the MBA Program Office.

■ What should you do?

Academic advisors are available to discuss your best course of action. Second-year students can also give a perspective on waivers but keep in mind that they may not be familiar with your background or experience. Even if you receive waivers, you can later decide to take the courses as you may decide that it would be good to have a review. It also may be helpful to take a Core class to learn about Wharton's approach to a particular subject in preparation for advanced electives. If you have any questions, please don't hesitate to contact the MBA Program Office at mbaprogram@wharton.upenn.edu.

Waiver and Placement Exam Schedule 2015 (subject to change)
Monday, August 3 and Tuesday, August 4

Course ID	Course Title	Day	Date	Time
ACCT 611/612	Accounting (Waiver and Placement Exams)	Mon	3-Aug	5:00 - 7:00 p.m.
FNCE 611/612	Corporate Finance	Mon	3-Aug	8:30 - 11:30 a.m. [†]
FNCE 613	Macroeconomics and the Global Economic Environment	Mon	3-Aug	2:30 - 4:30 p.m.*
MGEC 611	Microeconomics for Managers: Foundations	Tues	4-Aug	8:30 - 10:00 a.m.
MGEC 612	Microeconomics for Managers: Advanced Applications	Tues	4-Aug	10:15 - 11:30 a.m.
OPIM 611	Managing the Productive Core of the Firm: Quality and Productivity	Mon	3-Aug	12:00 - 2:00 p.m.
STAT 613	Regression Analysis for Managers	Tues	4-Aug	12:00 - 2:00 p.m.

[†]Students who score sufficiently well on the FNCE 611 waiver exam are granted waivers for FNCE 611, FNCE 612, and FNCE 614.

*Students who score sufficiently well on FNCE 613 waiver exam will be granted waivers for both FNCE 613 and FNCE 615.

Accounting (ACCT 611/612/613)

■ Course Description

The role of accounting is the accumulation, analysis, and presentation of relevant financial data of an enterprise to serve the needs of decision makers. The provision of multiple purpose information to serve the needs of interested parties outside a firm's management is referred to as financial accounting. The provision of information for internal decision making is referred to as managerial accounting. The objective of the core requirement in accounting is to teach the basic concepts, standards, and practices of financial reporting, leading to the ability to read and understand published financial statements and depending on the course chosen provide some of the rudiments of managerial accounting.

“TRACKS” WITHIN FINANCIAL ACCOUNTING

Students entering the MBA program at Wharton come with diverse backgrounds in accounting. Some are Certified Public Accountants with extensive academic and professional training. Others have had a course or two at school or in training programs. Other students enter Wharton with no exposure to accounting. As a result, we offer three courses with which students can meet the accounting requirement: ACCT 611 (a full semester, 1 credit unit course), ACCT 613 (a full semester, 1 credit unit course) and ACCT 612 (a half semester, 0.5 credit unit course). The difference between them is the material covered and the amount of time allotted to each topic. For example, ACCT 611 and ACCT 613 review basic accounting transactions, debits and credits, and income statement and balance sheet preparation, while ACCT 612 does not as students are expected to have that knowledge coming into the course. ACCT 611, 612 and 613 all discuss a variety of financial accounting topics in depth beyond those listed immediately above. ACCT 611 and ACCT 613 differ in that ACCT 611 is purely a financial accounting course, while ACCT 613 also teaches basic managerial accounting concepts and covers some of the financial accounting topics in less depth.

Students have three basic options for fulfilling their accounting requirement. They can:

1. **Waive accounting altogether**, either by credential or exam.
2. **Place into the accelerated course (ACCT 612)** either by credential or exam. Students in ACCT 612 are presumed to understand the following concepts:
 - the recording of economic transactions in the accounting records (i.e., bookkeeping);
 - the basic financial statements which summarize a firm's economic transactions (the balance sheet, the income statement and the statement of cash flows);
 - the fundamental concepts needed to prepare and understand published financial statements (e.g., use of accrual accounting);
 - how to construct the basic financial statements from transactions information and how to recreate the transactions by looking at the financial statements;

- how to use the indirect method to construct the cash flow statement from balance sheet, cash receipt, and supplemental information; and
- how to use accounting statements and disclosures to reconstruct the underlying economic events in which the firm participated.

3. Take one of the full semester courses (ACCT 611 or ACCT 613).

Please read the next section to decide which option is appropriate for your situation.

■ The Accounting Waiver and Placement Process

WAIVING OR PLACING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide.

Waiving the Accounting Core Requirement By Credentials

Waiver of the accounting core requirement without taking the waiver exam is only granted on the basis of credentials where there is no question about a student's background. Waiving of the accounting core requirement without the exam is allowed only for the following persons:

Individuals holding one of two professional certifications in accounting: certified public accountant (CPA) or chartered accountant (CA) AND who have practiced as an auditor within the prior five years.

Placing into ACCT 612 by Credential

Placement into ACCT 612 without taking the placement exam is **only** granted on the basis of credentials where there is no question about a student's background. Placement into ACCT 612 without the exam is allowed only for (1) individuals who, within the last five years, have taken introductory AND intermediate financial accounting (note that intermediate accounting is not managerial accounting, but is an advanced financial accounting course) with a grade of B or better in both courses within the last five years or (2) Wharton undergraduates who, within the last five years, received a grade of B or better in Accounting 101. Students placing into ACCT 612 by credential are not required to take ACCT 604, which takes place before Pre-Term, but it is recommended for those who feel they need a refresher given that the instructor will presume that students know the basic accounting concepts discussed above prior to the beginning of the course.

Documenting Your Credentials

Students interested in either placing into ACCT 612 by credential or waiving the accounting core requirement by credential must formally apply to the Wharton MBA Program Office by filling out and submitting the placement or waiver form.

- Persons holding professional certification (CPA or CA) have to submit a copy of their certification and submit a resume or a copy of their application which includes their recent work history.

WAIVING OR PLACING BY EXAM

EXAM DATE: Waiver and Placement Exam Schedule, and sample exams and solutions can be found in the Waiver Exam Guide.

A common misinterpretation of the waiver by credential criteria is that students must know accounting at the CPA level in order to waive the accounting core requirement. In fact, many students who do not meet the above criteria may be well qualified to waive the core requirement, or at least to place into ACCT 612. However, because it is difficult to objectively measure preparation from transcript materials, the department relies on waiver and placement exams when a student's credentials do not unambiguously meet the criteria.

Two different exams in Financial Accounting will be offered just prior to the official start of Pre-Term. Except as noted above, a student can waive the accounting core requirement or be placed into ACCT 612 **by taking the appropriate exam**. Students with some prior coursework in accounting are encouraged to sit for the placement exam so that they may take ACCT 612 and those with extensive work experience or prior coursework in accounting are encouraged to take the full waiver exam, so that they may waive the accounting core requirement completely. Students who complete ACCT 604 should sit for the placement exam, not the waiver exam. Students who complete ACCT 608 should sit for the waiver exam, not the placement exam. If a student sits for the waiver exam, but does not pass it, it is still possible to be placed in ACCT 612 with a sufficiently high score. Students with just some accounting background are likely better served by taking the placement exam, not the waiver exam.

The **Waiver and Placement Exam** selects from financial accounting topics covered throughout ACCT 611/612/613. The exams will be “closed book,” “closed notes,” and similar in form and content to past ACCT 611/613 and ACCT 612 exams. Copies of past ACCT exams are included in the *Waiver Exam Guide*.

Exam Preparation

The following are the accounting courses offered in the week prior to Pre-Term that help you prepare for the waiver and placement exam, as well as the fall semester.

ACCT 608: Financial Accounting – Waiver Prep Course

Upon completion of this review course, the student should be prepared to take the Waiver Exam. This course will meet on-campus in the week prior to Pre-Term. It is designed for students who have had substantial prior exposure to financial accounting but were not able to waive by credentials. It is presumed that the student enrolled in ACCT 608 has previously studied all of the financial accounting topics covered in ACCT 611/612/613. See the syllabi for these courses for more details, but these topics include provisions for uncollectible accounts, LIFO-FIFO inventories, leases, and deferred income taxes. The course will review these topics and more, emphasizing their implications for analyzing and interpreting financial statements.

ACCT 604: Financial Accounting Review Course

Upon completion of this course, the student should be prepared to take the Placement Exam. This course will meet on-campus in the week prior to Pre-Term. It is not a class for individuals who have had no prior exposure to financial accounting. Rather, it is a class for students with prior training in financial accounting, but who have been unable to place by credentials into the half semester financial accounting course, ACCT 612. Students who have placed into ACCT 612 by credentials who feel a need of a refresher can also take ACCT 604 as knowledge of all material covered in this course will be presumed in ACCT 612. ACCT 604 will briefly review the concepts underlying preparation of the balance sheet and the income statement. The course will also emphasize the preparation of the statement of cash flows as well as the interpretation of these statements using actual annual reports, and the reconstruction of the underlying economic events that affected these annual reports. **It is presumed that the student taking this course has previously studied all of this material or had significant exposure to financial statements.**

NEITHER WAIVING NOR PLACING (BY CREDENTIALS OR EXAM)**ACCT 603: Financial Accounting—Basic Course**

The material covered in this on-line summer course is required for all students taking one of the full semester versions of accounting (ACCT 611 or ACCT 613). ACCT 603 consists of on-line video lectures, homework, and a self-assessment exam. Students must complete ACCT 603 and pass the self-assessment exam prior to taking ACCT 611 or 613. ACCT 603 should require five hours to complete and students are strongly encouraged to complete it during July before arriving on campus. Student participation in ACCT 603 will be reported to the ACCT 611 or 613 instructors.

This chart may help you decide which preparatory course may be appropriate for you:

IF YOU HAVE:	NO Previous Accounting Experience	Previous Accounting Experience
Taken NO Previous Financial Accounting Courses	Take ACCT 603	Take ACCT 603
Taken ONE Previous Financial Accounting Course	Take ACCT 604	Take ACCT 604 or 608
Taken MORE THAN ONE Previous Financial Accounting Course	Take ACCT 608	Take ACCT 608

Syllabus (ACCT 611) Fundamentals of Financial Accounting

■ Overview

The role of accounting is the accumulation, analysis, and presentation of relevant financial data of an enterprise to serve the needs of creditors, investors and other external decision makers. The objective of this course is to familiarize the student with the basic principles and practices of financial accounting. This course focuses on the concepts underlying corporate financial statements. The course begins with an overview of the procedures necessary to prepare and understand the balance sheet, income statement, and statement of cash flows. The remainder of the course examines the accounting for the most common and significant transactions of a firm, such as accounts receivable and revenue recognition, inventories, longterm assets, debt, income taxes, investments, and stockholder's equity. Although a solid understanding of the rules and procedures required to construct financial statements is essential, this course emphasizes the analysis of financial statements and other financial disclosures.

■ Course Website

The website for this course can be found on Canvas: <https://canvas.upenn.edu/courses/1254101>

■ Course Material

TEXTBOOK (REQUIRED)

Dyckman, T., R. Magee, G. Pfeiffer, A. Hartgraves, and W. Morse, *Financial & Managerial Accounting for MBAs*, Wharton Custom Edition, 2014, Cambridge Business Publishers. This textbook is especially customized for our course, covers all the chapters in the class, and is available only in the Penn Bookstore. In the detailed schedule below, practice problems from the textbook are assigned to reinforce the material covered for each topic. Solutions to the problems in the textbook are posted on the course website.

MATERIAL ON COURSE WEBSITE

- **Lecture Slides:** the lecture slides will be made available in advance of class (at least one week before the scheduled date).
- **Homework Assignments** (for submission on Canvas) and **Cases** (for in-class discussion)
- **Exam Practice Problems and Solutions** (from old exams)
- **Articles:** business press articles are sometimes referenced in the course syllabus and provide context for issues, which will be discussed in class.

■ Grading Policy

Final grades will be determined using the following weights (Total: 100 points):

Midterm Exam	35 pts.
Final Exam	35 pts.
In-Class Quizzes	15 pts.
Homework	10 pts.
Class Participation	5 pts.

The grading scheme will be re-weighted to take into consideration improvement in student performance over the semester. If a student's mean-adjusted score on the Final Exam (i.e., adjusted for the mean class score) **improves** relative to his or her mean-adjusted score on the Midterm Exam, then the weight on the Midterm Exam will be reduced by 5 pts. (from 35 pts. to 30 pts.) and the weight on the Final Exam will be increased by 5 pts. (from 35 pts. to 40 pts.). Final course grades adhere to the school's mandated grade guidelines.

■ Midterm & Final Exams

The Midterm Exam will cover the material in Sessions 1 through 12, inclusive. The Final Exam is scheduled by the University Registrar and will be comprehensive, with a heavy emphasis on the material in Sessions 13 through 24.

All exams are closed-book, but you are allowed to bring to each exam one piece of 8 ½ x 11" paper with notes. This paper may contain handwritten or typed (any font and size) notes. You may write on both sides.

It is the student's responsibility to attend examinations at the times and places that are specified. If a student cannot attend an examination, **it is his/her responsibility to notify the MBA Office** and the instructor prior to the exam (or as soon as possible). **Only** the MBA Office may grant a student authorization to be absent from an examination; **there are no exceptions to this rule**. In the event of an *authorized* absence from any exam, a make-up exam will be given during the official make-up exam period that is set by the Registrar. You will receive a final grade of "Incomplete" for the course pending the completion of the make-up exam. **An unauthorized absence from an examination will result in a grade of zero for that examination.**

The graded mid-term exam will be returned to the student mail folders. Scores will be posted to Canvas. If you believe that your exam has been incorrectly graded, you should return your exam to me — *not a TA* — **within one week** of the return of the examination (requests made after that will not be considered). You must submit the original copy of the examination together with a **written** note that clearly explains what you believe is the error. **The entire exam will be re-graded.**

■ In-Class Quizzes

There will be five in-class quizzes during the semester that will be held on the dates indicated in the course outline. **Quizzes will be given at the beginning of the class** (late arrivals will not be accommodated, so make sure that you arrive to class on time), usually before we start a new topic. Each quiz will take about 10 to 20 minutes and will usually consist of about four or five questions (primarily multiple choice). The quizzes will be closed-book and no notes will be allowed. The material covered in each quiz is set out in the syllabus below. Quiz scores will be posted to Canvas.

In computing a student's final grade, only the **four highest quiz scores** will be counted (i.e., the lowest quiz score will be dropped from the computation of your grade). If for some reason you are unable to attend class on one of the five quiz days, I will simply count the four quizzes that are completed. **No make-up quizzes will be given.** The solutions will be posted on the class web site on the day of the quiz.

■ Homework

There will be three homework assignments with due dates indicated in the course outline. The homework assignments may be discussed in groups. However, you must submit your own solutions that represent your own individual work. It is not acceptable to copy another student's work and submit it as your own. The homework assignments will be available on the course website about one week before they are due. All homework must be submitted **electronically (via Canvas) by 6 p.m. on the due date. I strongly recommend that you submit your homework answers in advance of the 6 p.m. deadline. Please do not hand in a hard-copy to me or the TAs. It will not be accepted.** Homework scores and solutions will be posted on Canvas within shortly after the homework is due.

■ Class Participation and Conduct

Class participation grades will be based on what you add to the learning experience of the entire class. Students who consistently make contributions that facilitate discussions, help to clarify technical points, or provide new insights will receive five points. No contribution or contributions that are obvious, confusing, or peripheral will receive zero points. Consistently discourteous behavior (see below) will also result in zero class participation points. Contributions between these two extremes will receive between one and four points. Please make sure to display your name tents to help me learn your names and to help facilitate the classroom discussion.

As a courtesy to both me and your fellow students and to ensure that everyone has the greatest opportunity to learn, please adhere to the following:

- Students should sit in the same seat each class session to help me keep track of where everyone is.
- Class starts and ends on time. If a unique situation arises such that you must come in late, please inform your professor ahead of time and sit in an open aisle seat close to the door you arrived through.

- Students should remain in attendance for the duration of class, except in an emergency. If a unique situation arises such that you must leave early, please inform your professor before class and sit in an open aisle seat near the exits of the classroom.
- All phones and other electronic devices should be turned off, with the exception of computers/tablets. Use of computers/tablets, however, must be strictly for the purpose of this class.
- Please do not carry on private conversations during class.

■ Class Preparation

You should come to class having reviewed the daily class slides and, on days with an assigned article or case study, having read these materials and worked through the case questions. You should also read the suggested sections from the textbook either before or immediately after class, and work through at least some of the suggested practice problems from the textbook.

■ Teaching Assistants and Review Sessions

There are seven teaching assistants for the course. Each of these TAs is a second-year MBA student who performed extremely well in the introductory financial accounting course last year. The TAs will hold regular office hours on four out of five days every week (except during breaks or for holidays) based on the schedule posted on the course website.

During office hours, one of the TAs will be present and will assist with questions about concepts, assigned problems/cases, or homework problems (however, they will not give you the solution to the homework assignments). Note that the TAs are jointly servicing both ACCT 611 and ACCT 613, so you may encounter students from both courses attending the same office hours.

■ Ethics Matrix

The Wharton MBA Code of Ethics typically requests an Ethics Matrix for each class to provide ground rules and ethical guidelines for course materials and assistance from classmates or others. Below is the completed matrix for this course. If you have any questions about the matrix, please feel free to ask me.

	Materials							People			
	Approved calculator	Laptop / other electronics	Summary sheet of notes	Current book / class notes	Past notes / summaries	Past exams / assignments	Internet content / other outside materials	Learning team / approved work team	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term
In-Class Readings & Cases	A	A		A			A	W	W	W	
Homework Problem Sets	A	A		A			A	D	D	D	
In-Class Quizzes	A										
Midterm & Final Exams	A		A								

A = Allowed material W = Allowed to work together Shaded Cell = Not allowed
 D = Discussion of general concepts and procedures is allowed but no sharing of specific answers.

The information above covers many common situations but will not cover every circumstance. Remember: The **Wharton MBA Code of Ethics** that you accepted requires, among other things, that you represent yourself and your work honestly, don't try to gain unfair advantage over other students, follow the instructor's guidelines and respect confidentiality of your work and the work of others.

Should you have questions, please contact your ethics liaison or professor.

Course Outline (ACCT 611) Fundamentals of Financial Accounting

KEY

TB refers to the Dyckman et al. textbook (Wharton custom edition);
x-y means problem y in chapter x of the textbook.

Session 1. Introduction

Slides:	Session 1
TB Reading:	Chapter 1
TB Problems:	M1-24, E1-28, E1-29, P1-36, P1-37
Add. Reading:	Basics of Accounting Are Vital to Survival

Session 2. Accounting Process; Mapping Business Activity into Financial Statements

Slides:	Session 2
Case:	Animatronics (Q1 – Q4)
TB Reading:	Chapters 2 and 3
TB Problems:	Chapter 2: M2-18, M2-19, M2-26, E2-33, E2-44 Chapter 3: M3-22, M3-24, E3-32, E3-38
Add. Reading:	U.S. Firms Clash Over Accounting Rules

Session 3. Economics vs. Accounting; Balance Sheet Presentation; Introduction to Accrual Accounting

Slides:	Session 3
TB Reading:	Chapters 2 and 3
TB Problems:	Chapter 2: P2-58, P2-64 Chapter 3: P3-42, P3-49
Add. Reading:	When Balance Sheets Collide With the New Economy

Session 4. Revenue Recognition; Accrual Accounting and the Matching Principle

Slides:	Session 4
Case:	United Airlines
TB Reading:	Chapter 6, p. 267-277
TB Problems:	M6-14, M6-24, E6-32, E6-39, E6-40
Add. Reading:	Accounting Shift Would Lift Tech Profits; Zynga Explains Method for Recording Real Revenue; Boeing Hits a Milestone; Digging into Online Coupon Firm's Dealings; Microsoft Financials

Session 5. Statement of Cash Flows

Slides:	Sessions 5 & 6
Case:	Animatronics (Q5)
TB Reading:	Chapter 4
TB Problems:	M4-23, M4-26, M4-31, E4-34, E4-38, E4-41, E4-44
Add. Reading:	Cash Never Flow Lies; PepsiCo Statement of Cash Flows
Quiz #1:	10-20 minute quiz, covering Sessions 1-4

Session 6. Statement of Cash Flows (continued)

Slides:	Sessions 5 & 6
Case:	Callaway Golf
TB Reading:	Chapter 4
TB Problems:	P4-51, P4-54
Add. Reading:	Quick Cash Via Receivables Deals

Session 7. Introduction to Financial Statement Analysis (FSA)

Slides:	Session 7
TB Reading:	Chapter 5
TB Problems:	M5-14, M5-24, E5-27, E5-33, P5-46
Add. Reading:	Decline of the P/E Ratio; A Tower of Babel in Accounting; Home Depot Working Capital; PepsiCo Financials

Session 8. Accounts Receivable

Slides:	Session 8
Case:	Barnes & Noble
TB Reading:	Chapter 6
TB Problems:	M6-18, M6-20, E6-33, E6-34
Add. Reading:	Accounting Issues at WorldCom At Nortel, Warning Signs Existed Months Ago
Quiz #2:	10-20 minute quiz, covering Sessions 5-7

Session 9. Inventory & Cost of Goods Sold

Slides:	Session 9
Case:	Research in Motion
TB Reading:	Chapter 7
TB Problems:	M7-15, M7-19, M7-22, E7-26, E7-29, E7-31
Add. Reading:	Big Oil's Accounting; Unraveling Inventory's Riddle; Supplement to LIFO vs. FIFO; Boeing Hits a Milestone; Chesapeake's Obscure Costs

Session 10. Earnings Quality & Earnings Management

Slides:	Session 10
Case:	Detecting Earnings Management
TB Reading:	Chapter 6, p. 288-290; Earnings Quality (back of TB)
Add. Reading:	Autonomy Trails Rally; Tesla Earnings Quality Sketchy; Quality of Earnings and Earnings Management

Homework #1 (due at 6 p.m. two days after Session 10)

Topics covered: Accounts Receivable and Inventory

Session 11. Long-Lived Assets

Slides:	Sessions 11 & 12
TB Reading:	Chapter 8
TB Problems:	M8-11, M8-14, E8-24, P8-36
Add. Reading:	IFRS Spells Write-Downs; DirecTV Write-Downs

Session 12. Long-Lived Assets (continued)

Slides:	Sessions 11 & 12
Case:	Snap-On Tools
TB Problems:	M8-17, M8-21, E8-29, E8-32, E8-35
Add. Reading:	Demystify the Lehman Shell Game; HP to Book 8 bn Charge; SEC Makes B&N Justify Goodwill

Homework #2 (due at 6 p.m. on the day after Session 12)

Topics covered: Long-Lived Assets

MIDTERM EXAM

Topics covered: Sessions 1-12, inclusive

Session 13. Long-Term Debt

Slides:	Sessions 13 & 14
TB Reading:	Chapter 9, Appendix A (Time-Value of Money)
TB Problems:	M9-21, M9-22, M9-29, M9-31, M9-34, E9-39
Add. Reading:	Citigroup Finds a Profit

Session 14. Long-Term Debt (continued) and Leases (begin)

Slides:	Sessions 13 & 14; Session 15
Case:	Starbucks
TB Problems:	M9-23, M9-26, E9-47, P9-53
Add. Reading:	Morgan Stanley to Post a Loss from Bonds

Session 15. Leases (continued)

Slides:	Session 15
TB Reading:	Chapter 10, p. 453-466
TB Problems:	M10-13, M10-15, E10-23, E10-26
Add. Reading:	New Accounting Rules Ruffle the Leasing Market; Leases Suffer Identity Crisis; Northeast Airlines Financials

Session 16. Deferred Taxes

Slides:	Sessions 16 & 17
TB Reading:	Chapter 10, p. 476-483
TB Problems:	M10-22, E10-33, P10-40, P10-41
Add. Reading:	SEC Challenging Multinationals on Plans for Foreign Earnings; Sony Profits Are Far Off with Write-Down
Quiz #3:	10-20 minute quiz, covering Sessions 13-15

Session 17. Deferred Taxes (continued)

Slides:	Sessions 16 & 17
Case:	Safeway Inc.
TB Problems:	E10-32, P10-42, C10-47
Add. Reading:	Motorola Deal Offers Google Tax Benefits; Tax Twist: At Some Firms, Cutting Corporate Tax Rates May Cost Billions

Session 18. Stockholders' Equity

Slides:	Session 18
Case:	Pepsico
TB Reading:	Chapter 11
TB Problems:	M11-20, M11-21, M11-25, M11-35, E11-45, E11-54
Add. Reading:	Stock Buybacks Consume Cash; When Friending Becomes a Source of Funds; Time for BofA to Bid Warren Buffett Adieu

Session 19. Marketable Securities, Intercorporate Investments & Segment Reporting

Slides:	Sessions 19 & 20
Case:	Peet's Coffee
TB Reading:	Chapter 12, p. 555-567
TB Problems:	M12-11, M12-12, E12-24, E12-26
Add. Reading:	Bank Quandary – Valuing the Assets; Distortions in Baffling Financial Statements
Quiz #4:	10-20 minute quiz, covering Sessions 16-18

Session 20. Marketable Securities, Intercorporate Investments & Segment Reporting

Slides:	Sessions 19 & 20
TB Reading:	Chapter 12, p. 568-581; Back Chapter 12, p.589-599
TB Problems:	E6-38, M12-14, M12-15, Back Ch. 12: E-28, E-29, P-33
Add. Reading:	Buyers Beware: The Goodwill Games; The Importance of Segment Data; FASB Rethinks Business Segment Reporting

Session 21. Pensions and Other Post-Employment Benefits (OPEB)

Slides:	Session 21
Case:	Johnson & Johnson
TB Reading:	Chapter 10, p. 466-475
TB Problems:	M10-17, M10-20, E10-29, P10-38
Add. Reading:	U.S. Corporate Pension Plans' Funding Deficit; S&P 500 Companies Post Record Level of Pension Underfunding

Session 22. Interim Financial Reporting

Slides:	Session 22
TB Reading:	Back Chapter 12, p. 599-608
Add. Reading:	Taking Stock of S&P Earnings
Quiz #5:	10-20 minute quiz, covering Sessions 19-21

Session 23. Accounting for Financial Institutions

Slides:	Session 23
Add. Reading:	Distortions in Baffling Financial Statements; Deutsche Bank to Reduce Assets; Accounts Misled Us into Crisis

Session 24. "Capstone Case" and Review

Case:	Target Corp. Comprehensive Case
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Homework #3 due at 6 p.m. two days after Session 24

Topics covered: Marketable Securities and Pensions

FINAL EXAM

Topics covered: Comprehensive with emphasis on Sessions 13-24

Syllabus (ACCT 612) Accelerated Financial Accounting

■ Overview

Course objectives: Learn to read, understand, and analyze financial statements. The course adopts a decision-maker perspective of accounting and emphasizes the relation between accounting data and the underlying economic events that generate them. To achieve the objective of helping students become effective financial statement users, the course strikes a balance between the teaching of accounting mechanics and the analysis of financial statements. After a review of the construction and analysis of the Statement of Cash Flows, the course turns to an in-depth examination of the major asset, long-term liability, and shareholders' equity accounts. After completing this intensive introduction to financial accounting, students should be able to read, understand and recreate transactions from the financial statements.

Intended Audience: This course is intended for students with strong command of the material covered in the ACCT 604 pre-term class. Specifically, students entering ACCT 612 are expected to already understand: (1) The recording of economic transactions in the accounting records (i.e., bookkeeping); (2) The basic financial statements that summarize a firm's economic transactions (balance sheet, income statement and statement of cash flows); (3) The fundamental concepts needed to prepare or understand published financial statements (e.g., use of accrual accounting); (4) How to construct the basic financial statements from transactions information and how to recreate the transactions by looking at the financial statements; (5) How to use the indirect method to construct the cash flow statement from balance sheet, income statement, cash receipt and disbursement, and supplemental information; and (6) How to use accounting statements and disclosures to reconstruct the underlying economic events in which the firm participated.

ACCT 612 will be fully integrated into its companion, full semester, introduction-to-financial-accounting courses, ACCT 611 and ACCT 613. "Fully integrated" mean(s) that all three courses will use the same textbook, and similar cases, lecture slides, etc.: in effect, ACCT 612 will cover the same core material as ACCT 611 and ACCT 613, but at an accelerated pace because of the presumed background of students enrolling in ACCT 612.

■ Course Material

COURSE WEBSITE

The website for ACCT 612 can be found on Canvas: <https://canvas.upenn.edu/courses/1253246>.

Course material that can be found on the website includes:

- Lecture slides (which will be available in advance of the scheduled class date)
- Solutions to the assigned textbook exercises and problems
- Cases for in-class discussion (along with solutions after the case is discussed)
- Supplementary reading

TEXTBOOK (REQUIRED)

Dyckman, T., R. Magee, G. Pfeiffer, A. Hartgraves, and W. Morse, *Financial & Managerial Accounting for MBAs*, Wharton Custom Edition, 2014, Cambridge Business Publishers.

Cambridge Business Publishers customized this textbook for use in ACCT 611, 612, and 613 (in conjunction with offering a substantial discount to students); this textbook is only from the Penn Bookstore.

OTHER SUPPLEMENTARY READING

- *IFRS and US GAAP: similarities and differences*, PwC
- *Revenue recognition — Multiple element arrangements*, Ernst & Young
- *Lehman's Shell Game – Poor Risk Management*, Dutta, Caplan, and Lawson

■ Grading

Because ACCT 612 is an elite class for elite students, grading will be as straightforward as possible: the midterm exam will be graded based on 50 pts., the final exam will be graded based on 50 pts., and a student's course grade will be based on the cumulative score on both exams (in other words, based on 100 pts.). There will be no other quizzes, assignments, homework, required problems to-be-turned-in, etc., and class attendance and class participation will be completely voluntary.

■ Midterm and Final Exams

The midterm exam will cover the course material in Classes #1-6: see the Course Outline below. The final exam will be comprehensive; nonetheless, as a practical matter, it will focus *primarily* on the course material in Classes #7-12. In continuing with the theme of ACCT 612 being an elite class for elite students, both exams will be closed book, closed notes, no electronic devices, etc.: in effect, the only items a student can take with him or her to the exam are writing materials and calculators (we will supply blank 'scratch paper' if a student so desires).

Students have a responsibility to attend examinations at the specified times. If a student cannot attend an examination, it is his/her responsibility to notify the MBA Office (and me) prior to the exam. The MBA Office has exclusive purview over whether to grant a student authorization to be absent from an examination. In the event of an *authorized* absence from any exam, a make-up exam will be administered during the official make-up exam period that is set by the Registrar: a student will receive a final grade of "Incomplete" for the course pending the completion of the make-up exam. An unauthorized absence from an examination will result in a grade of zero for that examination.

Summary statistics of performance on the midterm and final exams, along with suggested solutions, will be posted to Canvas. *Requests to re-grade exams are strongly discouraged!* Exams should be thought of as part of a collaborative process between an instructor and students; if a student has a valid inquiry about how a specific question was graded, he or she must submit: 1) the original copy of the exam; and 2) a *detailed* explanation of the issue/controversy/error. When processing a re-grade request, we reserve the right to review the entire exam – not just the issue in question.

Course Outline (ACCT 612) Accelerated Financial Accounting

KEY

TB = “T(ext)B(ook)”: Dyckman, Magee, Pfeiffer, Hartgraves, and Morse (2014).

Preliminary Course Preparation

Case: Animatronics (Questions 1-4)

Session 1. Statement of Cash Flows

Slides: Class #1
 TB Reading: Chapter 4
 TB Problems: E4-34, E4-38, E4-41, E4-44, P4-51, P4-52, P4-54
 Cases: Animatronics (Question 5); Callaway Golf
 Supp. Reading: Cash Never Flow Lies; PepsiCo Statement of Cash Flows; Quick Cash via Receivables Deals

Session 2. Revenue Recognition

Slides: Class #2
 TB Reading: Chapter 6, p. 267-277
 TB Problems: M6-14, M6-24, E6-32, E6-39, E6-40
 Case: United Airlines
 Supp. Reading: Got'em, Gotham; Accounting Shift Would Lift Tech Profits; Zynga Explains Method for Recording Real Revenue; Boeing Hits a Milestone; Digging into Online Coupon Firm's Dealings; Microsoft Financials

Session 3. Accounts Receivable

Slides: Class #3
 TB Reading: Chapter 6
 TB Problems: M6-18, M6-20, E6-33, E6-34
 Case: Barnes & Noble
 Supp. Reading: Freedom to fudge; Accounting Issues at WorldCom; At Nortel, Warning Signs Existed Months Ago

Session 4. Inventory and Cost of Goods Sold (COGS)

Slides: Class 4
 TB Reading: Chapter 7
 TB Problems: M7-15, M7-19, M7-22, E7-26, E7-29, E7-31
 Case: Research in Motion
 Supp. Reading: Big Oil's Accounting; Unraveling Inventory's Riddle; Fade to BlackBerry; Boeing Hits a Milestone; Chesapeake's Obscure Costs

Session 5. Long-Lived Assets

Slides:	Classes #5 & #6
TB Reading:	Chapter 8
TB Problems:	M8-11, M8-14, E8-24, P8-36
Case:	Berwick Tools
Supp. Reading:	IFRS Spells Write-Downs; DirecTV Write-Downs

Session 6. Long-Lived Assets (continued)

Slides:	Classes #5 & #6
TB Problems:	M8-17, M8-21, E8-29, E8-32, E8-35
Supp. Reading:	Demystify the Lehman Shell Game; HP to Book 8 bn Charge; SEC Makes B&N Justify Goodwill

Review for Midterm Exam

MIDTERM EXAM (Topics covered: classes #1-6)

Session 7. Long-Term Debt

Slides:	Class #7
TB Reading:	Chapter 9, Appendix A (Time-Value of Money)
TB Problems:	M9-22, M9-23, M9-31, M9-34, E9-47, P9-53, P9-55
Case:	Starbucks
Supp. Reading:	Citigroup Finds a Profit; Morgan Stanley to Post a Loss from Bonds

Session 8. Leases

Slides:	Class #8
TB Reading:	Chapter 10, p. 453-466
TB Problems:	M10-13, M10-15, E10-23, E10-26
Case:	Safeway (Leases)
Supp. Reading:	New Accounting Rules Ruffle the Leasing Market; Leases Suffer Identity Crisis; Northeast Airlines Financials

Session 9. Deferred Taxes

Slides:	Class #9
TB Reading:	Chapter 10, p. 476-483
TB Problems:	M10-22, E10-32, P10-40, P10-41, P10-42, C10-47
Case:	Safeway (Taxes)
Supp. Reading:	SEC Challenging Multinationals on Plans for Foreign Earnings; Sony Profits Are Far Off with Write-Down; Motorola Deal Offers Google Tax Benefits; Tax Twist: At Some Firms, Cutting Corporate Tax Rates May Cost Billions

Session 10. Marketable Securities and Intercorporate Investments

Slides:	Class #10 & #11
TB Reading:	Chapter 12, p. 555-581
TB Problems:	M12-11, M12-12, E12-24, E12-26, E12-38
Case:	Peet's Coffee
Supp. Reading:	Bank Quandary – Valuing the Assets; Distortions in Baffling Financial Statements

Session 11. Marketable Securities and Intercorporate Investments (continued)

Slides:	Class #10 & #11
TB Reading:	Chapter 12, p. 555-581
TB Problems:	M12-14, M12-15, E12-28, E12-29, E12-34
Supp. Reading:	Buyers Beware: The Goodwill Games

Session 12. Financial Statement Analysis: Professor Stephanie A. Sikes

Slides:	Class #12
TB Reading:	Chapter 5

Review for Final Exam

FINAL EXAM (Topics covered: comprehensive, but primary focus on Classes #7-12)

Syllabus (ACCT 613) Fundamentals of Financial and Managerial Accounting

■ Overview

This course provides an introduction to both financial and managerial accounting, and emphasizes the analysis and evaluation of accounting information from the perspective of both investors as well as managers in the processes of planning, decision-making, and control. A large aspect of the course covers the fundamentals of financial accounting. The objective is to provide an overview of financial accounting and external reporting, including basic accounting concepts and principles, as well as the structure of the income statement, balance sheet, and statement of cash flows. The course also introduces elements of managerial accounting and emphasizes the development and use of accounting information for internal decisions. Topics include cost behavior and analysis, product and service costing and relevant costs for internal decisionmaking. This course is recommended for students who will be using accounting information for making strategic decisions in manufacturing and service operations, as well as those going into general consulting, thinking of starting their own businesses, or simply seeking a broad understanding of accounting and financial reporting as it relates to shareholders, creditors, managers and other users of financial information.

■ Course Website

The website for this course is on Canvas.

■ Course Material

TEXTBOOK (REQUIRED)

Dyckman, T., R. Magee, G. Pfeiffer, A. Hartgraves, and W. Morse, *Financial & Managerial Accounting for MBAs*, Wharton Custom Edition, 2014, Cambridge Business Publishers.

This textbook is specifically customized for our course, covers all the chapters in the class, and is available only in the Penn Bookstore. In the detailed schedule below, practice problems from the textbook are assigned to reinforce the material covered for each topic (we refer to 'TB' for textbook in the syllabus). Solutions to the problems in the textbook are posted on the course website.

MATERIAL ON COURSE WEBSITE

- **Lecture Slides:** the lecture slides will be made available in advance of class (at least one week before the scheduled date).
- **Homework Assignments** (for submission on Canvas) **and Cases** (for in-class discussion)
- **Exam Practice Problems and Solutions** (from old exams)
- **Articles:** business press articles are sometimes referenced in the course syllabus and provide context for issues, which will be discussed in class.

■ Grading Policy

Final grades will be determined using the following weights (total: 100 points):

Midterm Exam	35 pts.
Final Exam	35 pts.
In-Class Quizzes	15 pts.
Homework	10 pts.
Class Participation	5 pts.

The grading scheme will be re-weighted to take into consideration improvement in student performance over the semester. If a student's mean-adjusted score on the Final Exam (i.e., adjusted for the mean class score) **improves** relative to the mean-adjusted score on the Midterm Exam, then the weight on the Midterm Exam is reduced by 5 pts. (from 35 pts. to 30 pts.) and the weight on the Final Exam is increased by 5 pts (from 35 pts. to 40 pts.).

Final course grades adhere to the school mandated grade guidelines. **Note that this allows for up to 5% failing grades. Historically this course does give some failing grades each year.**

■ Midterm & Final Exams

The midterm exam covers the material in lectures 1 through 12, inclusive. The final exam is scheduled by the University Registrar and covers the material in lectures 13 through 24, inclusive.

Exams are closed-book, but you are allowed to bring to each exam one piece of 8 ½ x 11" paper with notes. This paper may contain handwritten or typed (any font and size) notes. You may write on both sides. You are allowed to use a regular calculator during the exams.

It is the student's responsibility to attend examinations at the times and places specified. If a student cannot attend an examination, **it is his/her responsibility to notify the MBA Office** and the instructor prior to the exam (or as soon as possible). **Only** the MBA Office may grant a student authorization to be absent from an examination; **there are no exceptions to this rule**. In the event of an authorized absence from any exam, a make-up exam is given during the official make-up exam period set by the Registrar. You will receive a final grade of "Incomplete" for the course pending the completion of the make-up exam. An unauthorized absence from an examination will result in a grade of zero for that examination.

The graded mid-term exam will be returned to the student mail folders. The graded final exam can be picked up at the reception area of the accounting suite (SH-DH 1300) until the first week of spring semester classes (you will need to bring your student ID to collect the exam). Exam scores will be posted online. If a student feels that an exam has been incorrectly graded, he/she should

return the exam to the professor — *not a TA* — **within one week** of the return of the examination (requests made after that will not be considered). The student should submit the original copy of the completed examination together with a **written** note that carefully explains the point of contention. **The entire exam will be re-graded.**

■ In-Class Quizzes

There are **five** in-class quizzes during the course of the semester. **Quizzes are given at the beginning of the class** (late arrivals will not be accommodated with extra time, so be punctual). Each quiz will take about 15 minutes, and will consist of about 4-5 questions (primarily multiple choice). The quizzes will be closed-book and no notes will be allowed. The material covered in each quiz is set out in the syllabus below.

In computing a student's final grade, only the **four highest quiz scores** will be counted (i.e., the lowest quiz score will be dropped from the computation of your grade). If for some reason you are unable to attend class on one of the five quiz days, we will simply count the four quizzes that are completed. **No make-up quizzes will be given.** The quiz solutions and scores will be posted on the class web site within a day or so of taking the quiz.

■ Homework

There are four homework assignments with due dates indicated in the class outline. The homework assignments may be discussed in groups. However, the solution submitted by each student must be his/her own individual work. It is not acceptable to copy another student's work and submit it as your own. Doing so will be considered an act of cheating. The homework assignments #1, #2, and #4 will be available on the course website. They must be submitted **via Canvas by the due date and time listed. Please do not hand in a hard copy to me or the TAs. It will not be accepted.** Scores and solutions for homework assignments #1, #2, and #4 will be posted online on the course website within a day or so of the homework being due.

The homework assignment #3 consists of preparing a written solution for either Case #10, #11, or #12 as indicated in the class outline. This homework assignment must be submitted as **hard copy** (no more than 3 pages) before the beginning of class when the respective case is on the course outline. Each student must only pick one of the three cases. Again, the case solutions may be discussed in groups, but the write-up submitted must be each student's own work.

■ Class Participation and Conduct

Class participation grades are based on what you add to the learning experience of the entire class. Students who consistently make contributions that facilitate discussions, help to clarify technical points, or provide new insights will receive 5 points. No contribution or contributions that are obvious, confusing or peripheral will result in zero points. Consistently discourteous behavior (see below) will also result in zero class participation points. Contributions between the endpoints will receive between 1 and 4 points, accordingly. Please display name tents to make it easier for me to keep track of participation (I'm not great with names – sorry, and thank you!).

Both as a courtesy to your fellow students and the professor, and to ensure that everyone has the greatest opportunity to learn, please observe the following:

- Students should sit in the same seat each class session to help me keep track of where everyone is.
- Class starts and ends on time. If a unique situation arises such that you must come in late, please inform your professor ahead of time and sit in an open aisle seat close to the door you arrived through.
- Students should remain in attendance for the duration of class, except in an emergency. If a unique situation arises such that you must leave early, please inform your professor before class and sit in an open aisle seat near the exits of the classroom.
- All phones and other electronic devices should be turned off, with the exception of computers/tablets. Use of computers/tablets, however, must be strictly for the purpose of this class.
- Please do not carry on private conversations during class.

■ Student Preparation

Students should come to class having reviewed the daily class slides and, on days with an assigned article or case study, having read these materials and worked through the case questions. It is also recommended that students read the suggested chapter sections from the textbook either before or immediately after the class, and work through at least some of the suggested practice problems from the textbook.

■ Teaching Assistants and Review Sessions

There are seven teaching assistants for the course. Each of these TAs is a second-year MBA student who performed extremely well in the introductory financial accounting course last year. The TAs will hold regular office hours on four out of five days every week (except during breaks or for holidays) based on the schedule posted on the course website.

During office hours, one of the TAs will be present and will assist with questions about concepts, assigned problems/cases, or homework problems (however, they will not give you the solution to the homework assignments). Note that the TAs are jointly servicing both ACCT 611 and ACCT 613, so you may encounter students from both courses attending the same office hours.

■ Ethics Matrix

The Wharton MBA Code of Ethics typically requests an Ethics Matrix for each class to provide ground rules and ethical guidelines for course materials and assistance from classmates or others. Below is the completed matrix for ACCT 613. If you have any questions about the matrix, please feel free to ask me.

	Materials							People			
	Approved calculator	Laptop / other electronics	Summary sheet of notes	Current book / class notes	Past notes / summaries	Past exams / assignments	Internet content / other outside materials	Learning team / approved work team	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term
In-Class Readings & Cases	A	A		A			A	W	W	W	
Homework Problem Sets	A	A		A			A	D	D	D	
In-Class Quizzes	A										
Midterm & Final Exams	A		A								

A = Allowed material W = Allowed to work together Shaded Cell = Not allowed
 D = Discussion of general concepts and procedures is allowed but no sharing of specific answers.

The information above covers many common situations but will not cover every circumstance. Remember: The **Wharton MBA Code of Ethics** that you accepted requires, among other things, that you represent yourself and your work honestly, don't try to gain unfair advantage over other students, follow the instructor's guidelines and respect confidentiality of your work and the work of others.

Should you have questions, please contact your ethics liaison or professor.

Course Outline (ACCT 613) Fundamentals of Financial and Managerial Accounting

KEY

TB refers to the Dyckman et al. textbook (Wharton custom edition);
x-y means problem y in chapter x of the textbook.

All of the topics listed below will be covered.

Session 1. Introduction

Slides: Session 1
TB Reading: Chapter 1
TB Problems: M1-24, E1-28, E1-29, P1-36, P1-37
Add. Reading: Basics of Accounting Are Vital to Survival

Session 2. Accounting Process; Mapping Business Activity into Financial Statements

Slides: Session 2
Case #1: Animatronics (Q1 – Q4)
TB Reading: Chapters 2 and 3
TB Problems: Chapter 2: M2-18, M2-19, M2-26, E2-33, E2-44
Chapter 3: M3-22, M3-24, E3-32, E3-38
Add. Reading: U.S. Firms Clash Over Accounting Rules

Session 3. Economics vs. Accounting; Balance Sheet Presentation; Introduction to Accrual Accounting

Slides: Session 3
TB Reading: Chapters 2 and 3
TB Problems: Chapter 2: P2-58, P2-64
Chapter 3: P3-42, P3-49
Add. Reading: When Balance Sheets Collide With the New Economy

Session 4. Revenue Recognition; Accrual Accounting and the Matching Principle

Slides: Session 4
Case #2: United Airlines
TB Reading: Chapter 6, p. 267-277
TB Problems: M6-14, M6-24, E6-32, E6-39, E6-40
Add. Reading: Accounting Shift Would Lift Tech Profits; Zynga Explains Method for Recording Real Revenue; Boeing Hits a Milestone; Digging into Online Coupon Firm's Dealings; Microsoft Financials

Session 5. Statement of Cash Flows

Slides:	Sessions 5 & 6
Case #1:	Animatronics (Q5)
TB Reading:	Chapter 4
TB Problems:	M4-23, M4-26, M4-31, E4-34, E4-38, E4-41, E4-44
Add. Reading:	Cash Flow Never Lies; PepsiCo Statement of Cash Flows
Quiz #1:	10-20 minute quiz, covering Sessions 1-4

Session 6. Statement of Cash Flows (continued)

Slides:	Sessions 5 & 6
Case #3:	Callaway Golf
TB Reading:	Chapter 4
TB Problems:	P4-51, P4-54
Add. Reading:	Quick Cash Via Receivables Deals

Session 7. Introduction to Financial Statement Analysis (FSA)

Slides:	Session 7
TB Reading:	Chapter 5
TB Problems:	M5-14, M5-24, E5-27, E5-33, P5-46
Add. Reading:	Decline of the P/E Ratio; A Tower of Babel in Accounting; Home Depot Working Capital; PepsiCo Financials

Session 8. Accounts Receivable

Slides:	Session 8
Case #4:	Barnes & Noble
TB Reading:	Chapter 6
TB Problems:	M6-18, M6-20, E6-33, E6-34
Add. Reading:	Accounting Issues at WorldCom; At Nortel, Warning Signs Existed Months Ago
Quiz #2:	10-20 minute quiz, covering Sessions 5-7

Session 9. Inventory, Product Costing, and Cost of Goods Sold

Slides:	Session 9
Case #5:	Research in Motion
TB Reading:	Chapter 7
TB Problems:	M7-15, M7-19, M7-22, E7-26, E7-29, E7-31
Add. Reading:	Big Oil's Accounting; Unraveling Inventory's Riddle; Supplement to LIFO vs. FIFO

Session 10. Inventory, Product Costing, and Cost of Goods Sold (continued)

Slides:	Session 10
TB Reading:	Chapter 17, p. 17-1 to 17-19
TB Problems:	M17-14, M17-15, E17-21, E17-25, E17-26
Add. Reading:	Boeing Hits a Milestone; Chesapeake's Obscure Costs

Session 11. Long-Lived Assets

Slides:	Sessions 11 & 12
TB Reading:	Chapter 8
TB Problems:	M8-11, M8-14, E8-24, P8-36
Add. Reading:	IFRS Spells Write-Downs; DirecTV Write-Downs

Homework #1 due at 6 p.m. on the day after Session 11

Topics covered: Accounts Receivable and Inventory

Session 12. Long-Lived Assets (continued)

Slides:	Sessions 11 & 12
Case #6:	Snap-On Tools
TB Problems:	M8-17, M8-21, E8-29, E8-32, E8-35
Add. Reading:	Demystify the Lehman Shell Game; HP to Book 8 bn Charge; SEC Makes B&N Justify Goodwill

Homework #2 due at 6 p.m. two days after Session 12

Topics covered: Long-Lived Assets

MIDTERM EXAM

Topics covered: Sessions 1-12, inclusive

Session 13. Long-Term Debt

Slides:	Sessions 13 & 14
TB Reading:	Chapter 9, Appendix A (Time-Value of Money)
TB Problems:	M9-21, M9-22, M9-29, M9-31, M9-34, E9-39
Add. Reading:	Citigroup Finds a Profit

Session 14. Long-Term Debt (continued) and Leases (begin)

Slides:	Sessions 13 & 14; Session 15
Case #7:	Starbucks
TB Problems:	M9-23, M9-26, E9-47, P9-53
Add. Reading:	Morgan Stanley to Post a Loss from Bonds

Session 15. Leases (continued)

Slides:	Session 15
TB Reading:	Chapter 10, p. 453-466
TB Problems:	M10-13, M10-15, E10-23, E10-26
Add. Reading:	New Accounting Rules Ruffle the Leasing Market; Leases Suffer Identity Crisis; Northeast Airlines Financials

Session 16. Deferred Taxes

Slides:	Session 16
TB Reading:	Chapter 10, p. 476-483
TB Problems:	M10-22, E10-33
Add. Reading:	SEC Challenging Multinationals on Plans for Foreign Earnings; Motorola Deal Offers Google Tax Benefits
Quiz #3:	10-20 minute quiz, covering Sessions 13-15

Session 17. Deferred Taxes (continued); Owners' Equity (begin)

Slides:	Session 16 & Session 17
Case #8:	PepsiCo
TB Reading:	Chapter 11
TB Problems:	Chapter 10: P10-40, P10-41
Chapter 11:	M11-20, M11-21
Add. Reading:	Sony Profits Are Far Off with Write-Down; Stock Buybacks Consume Cash

Session 18. Owners' Equity (continued)

Slides:	Session 17
Case #8:	PepsiCo (continued)
TB Reading:	Chapter 11
TB Problems:	M11-25, M11-35, E11-45, E11-54
Add. Reading:	Friending Becomes a Source of Funds; Time for BofA to Bid Warren Buffett Adieu

Session 19. Managerial Accounting & Cost Concepts

Slides:	Sessions 19 & 20
TB Reading:	Chapters 13 and 15
TB Problems:	Chapter 13: M13-14, E13-22, E13-24 Chapter 15: M15-11, M15-12, M15-16, E15-25
Add. Reading:	Lobster Glut Slams Prices; Will Costs Drive U.S. Firms Home?
Quiz #4:	10-20 minute quiz, covering Sessions 16-18

Session 20. Cost Concepts (continued)

Slides:	Sessions 19 & 20
Case #9:	Forest Gump
TB Reading:	Chapter 16
TB Problems:	M16-12, M16-15, M16-17, E16-22, E16-26
Add. Reading:	Paramount Pictures Resolves Lawsuit

Session 21. Cost Allocation and Activity-Based Costing

Slides:	Session 21
Case #10:	Wilkerson Company (HW #3)
TB Reading:	Chapters 14 and 18, p. 18-1 to 18-13
TB Problems:	Chapter 14: M14-11, M14-14, P14-27 Chapter 18: M18-10, M18-13, M18-16, E18-22
Add. Reading:	Knee Replacements Boost Health Costs

Session 22. Customer Profitability Analysis

Slides:	Session 22
Case #11:	Infinity Bank (HW #3)
TB Reading:	Chapters 18, p. 18-14 to 18-17, and 19, p. 19-1 to 19-9
TB Problems:	Chapter 18: M18-18, E18-26, E18-27 Chapter 19: M19-17
Add. Reading:	Free Checking Accounts Cost More
Quiz #5:	10-20 minute quiz, covering Sessions 19-21

Session 23. Decentralization and Transfer Pricing

Class Notes:	Session 23
Case #12:	Caribbean Brewers (HW #3)
TB Reading:	Chapters 22, p. 22-1 to 22-9, and 23, p. 23-7 to 23-10
TB Problems:	Chapter 22: MA22-42 Chapter 23: M23-19, E23-24, MA23-41
Add. Reading:	Tax Court Rules Against IRS

Session 24. Final Review and Course Wrap-Up

Slides:	Session 24
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Homework #4, due at 6 p.m. on the day after Session 24

Topics covered: Managerial Accounting, Cost Concepts, Cost Allocation

FINAL EXAM

Topics covered: Sessions 13-24, inclusive

Corporate Finance (FNCE 611/612)

■ Course Description

These courses serve as an introduction to business finance (corporate financial management and investment) for both non-majors and majors preparing for upper-level coursework. The primary objective is to provide a framework, concepts, and tools for analyzing financial decisions based on fundamental principles of modern financial theory.

■ The Corporate Finance (FNCE 611/612) Waiver and Placement Process

WAIVING BY EXAM

EXAM DATE: See Waiver and Placement Exam Schedule table in the Introduction to this Waiver Guide. A sample exam and solution set can be found in the Waiver Exam Guide.

The Finance Department recognizes that many students enter the MBA program with strong backgrounds in economics and/or finance. Nonetheless, before permitting them to waive the core courses, we want to verify their mastery of these subjects on a waiver exam.

Students who score sufficiently well on the Corporate Finance waiver exam are granted waivers for all three versions of Corporate Finance — the full-semester version (FNCE 611), the accelerated, half-semester version (FNCE 612), and the half-semester version (FNCE 614). Students who hope to take the accelerated version of Corporate Finance (FNCE 612) should register for the Pre-Term preparation class, FNCE 604.

Exam Preparation

Either of the following two books can be used to prepare for the Waiver and Placement Exams.

- R. A. Brealey, S. C. Myers, and F. Allen, *Principles of Corporate Finance*, 11th edition (New York: McGraw Hill, 2014).
- J. Berk, and P. DeMarzo, *Corporate Finance*, 3rd edition (Boston: Pearson, 2014).

PLACING BY EXAM OR CREDENTIALS INTO FNCE 612

Students who were finance majors in college may place directly into FNCE 612 by submitting credentials such as a transcript. Note that being a finance major is the only credential that allows one to place into FNCE 612 without taking the Placement Exam. Students who were not finance majors but would like to take FNCE 612 will need to pass the Placement Exam to be eligible to register.

Syllabus FNCE 611

■ Overview

This course covers the foundations of finance with an emphasis on applications that are vital for corporate managers. We will discuss most of the major financial decisions made by corporate managers both within the firm and in their interactions with investors. Essential in most of these decisions is the process of valuation, which will be emphasized throughout the course. Topics include criteria for making investment decisions, valuation of financial assets and liabilities, relationships between risk and return, capital structure choice, payout policy, the effective use and valuation of derivative securities (futures, options, and convertible securities), and risk management.

Students who are more comfortable with the subject matter because of previous academic or professional experience are encouraged to take the course with Professor Van Binsbergen. Students who are new to finance, less familiar with the institutional environment, or generally less comfortable with the subject matter are encouraged to take the course with Professor Roberts. This division is solely for the purpose of improving the in-class experience by encouraging everyone to engage in the classroom discussion. The subject matter, materials, and exams for all 611 sections will be identical to ensure that all students regardless of their instructor receive the same training.

■ Course Materials

READING MATERIAL

The textbook for the course is: *Corporate Finance* (plus MyFinanceLab), Jonathan Berk and Peter DeMarzo, 3rd ed., Pearson - Prentice Hall, 2014. (SBN-10: 0-13-342415-4; ISBN-13: 978-0-13-342415-7).

Other required readings are listed in the syllabus and made available through Canvas or Study.net.

SLIDES

PowerPoint slides for all of the class sessions are available on Canvas.

CASES

Cases are available on Study.net. Case-related material, if any, will be made available on Canvas.

ADDITIONAL MATERIAL

Additional copywritten material (e.g., readings) will be made available on Study.net, non-copywritten material (e.g., notes, supplemental exercises) will be made available on Canvas.

■ Class Preparation

Coming to class prepared is crucial for your success in the course, and the success of the course. Class participation comprises a significant component of your overall grade for the course

(discussed below), where participation refers to active engagement in the classroom discussion on a recurring basis. The classroom environment will be one of discussion and collaboration. An integral part of the learning experience is learning from your colleagues, their experiences, and the classroom discussion.

Preparation consists of completing the relevant readings and cases prior to the session in which they will be discussed. Cold calling will be used liberally. Answers to case questions must be placed in a PowerPoint file – one slide per question – and turned in the night before the case is discussed in class. I will randomly choose case solutions to discuss in class.

An important by-product of proper preparation is that it lessens the chances of falling behind in the course and being unable to catch up. This course covers a large amount of material in significant depth. It is very easy to fall behind. Consider this a warning. Do not fall behind.

■ Class Preparation

You should bring a laptop or tablet with a spreadsheet application to class. You may need these for problem solving sessions during class. Other than these indicated times, no electronics (e.g., laptops, tablets, phones, etc.) should be used in class.

Students are expected to respect the University of Pennsylvania's Code of Academic Integrity (http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html) and to behave with integrity in all aspects of the course. Students are encouraged to discuss the cases and other content of the course with first-year MBA student in their own section and in other sections. However, students should not discuss the content related to the current day's class discussion or exam during the time period between sections to avoid giving later sections an unfair advantage. Violations of the honor code will be immediately reported to the administration.

■ Grading

Your course grade will be determined by your class participation (20%), completion of the MyFinanceLab homework assignments (20%), a midterm (20%), and a final exam (40%). If your score on the final exam is greater than that on the midterm, I will replace your midterm score with your final score, which will then count for 60% of your grade. However, this substitution can only occur if you take the midterm and receive a minimum number of points to be determined at the time of the exam.

The purpose of the MyFinanceLab homework, like preparing for course, is to keep you up to date with the course material. Because students have unlimited attempts on MyFinanceLab to get each assignment right (before its due date), almost all students receive full points on the homework. This means that not doing an assignment (or getting less than full points on it) puts you at a considerable disadvantage when the final grade is computed.

Grades are determined using a class-wide (i.e., across all of my sections) curve that respects any constraints imposed by the University or Wharton.

REGRADES

Students have exactly one week from the day they receive their midterm exam to request a regrade. The request must be attached to the exam and clearly state the reason(s) for the regrade. The only valid reason for a regrade is an error on my part. I will not debate the merits of my grading scheme. If the regrade request is accepted, the exam will be regarded in its entirety. As a result, the revised score may go up, down, or stay the same.

I will schedule two days during the Spring semester during which you may view your final and discuss your grades. These days will be announced during the semester. Any concerns regarding final exam or course grade will be settled at that time.

■ Attendance

Students are expected to attend all classes. It is also expected that students will be on time for class and will not disrupt the class by leaving early or by leaving and returning to class. I recognize that personal emergencies can arise, causing a student to miss a class or part of a class. If such a circumstance arises, please notify me via email of the situation. If circumstances do not permit prior notification, please do so as soon after the missed class as possible.

■ Exams

There are no makeup exams. If you miss the midterm exam, regardless of the reason, your final score will be used in its place. If you miss the final exam, you will automatically fail the course. The only excuse for missing the final exam is a medical emergency, the validity of which will be verified by the University.

Course Outline FNCE 611

Course Introduction and Overview

Read: Syllabus
Canvas course website containing all non-copywritten material
Study.net containing all copywritten material

Topic 1: Time Value of Money

Read: Chapter 3: Financial Decision Making and the Law of One Price
Chapter 4: The Time Value of Money

Concepts: Compounding and discounting, Future value and present value, Annuities, Retirement savings

Applications: Valuing zero-coupon bonds, Valuing and structuring annuities, Retirement planning

Topic 2: Financial Decision Making and Capital Budgeting

Read: Chapter 2: Introduction to Financial Statement Analysis
Chapter 8: Fundamentals of Capital Budgeting

Prepare: Case: Callaway Golf FX-1

Concepts: Free cash flow, Discount rates and cost of capital, Discounted cash flow (DCF), Net present value (NPV), Sensitivity analysis, Scenario analysis, Breakeven analysis, Value drivers, Profit margins and operating leverage, Profitability index

Applications: Strategic decision-making, Capital budgeting, Financial statement analysis, Strategic decision making with resource constraints

Topic 3: Financial Analysis: Return on Investment

Read: Chapter 5: Interest Rates
Chapter 7: Investment Decision Rules

Prepare: Should you pay cash for a new car?

Concepts: Internal rate of return, Hurdle rate

Applications: Amortizing loans, Personal finance (auto loans, leases, mortgages)

Topic 4: Interest Rates and Bond Valuation

Read: Chapter 6: Valuing Bonds
Chapter 30: Duration (§30.4)

Prepare: Case: Orange County

Concepts: Yield to maturity, Yield curves, Bond Institutions and Markets, Valuing risk-free bonds, Bond-interest Rate Relation, Bond arbitrage, Interest rate sensitivity of bond prices (Duration), Leverage

Applications: Valuing and investing in treasury securities, Managing a bond portfolio, Further Concepts:, Collateralized debt obligations (CDOs), Immunization and duration matching, Forward rates, Credit risk

Topic 5: Valuing Stocks

Read:	Chapter 9: Valuing Stocks
Prepare:	Case: Interco
Concepts:	Measuring returns, Equity cost of capital, Dividend yield, Capital gains, Dividend discount model, Cum- and Ex-dividend prices, Share repurchases, Price-earnings (P/E) ratio, Return on investment, Enterprise value, Comparables analysis
Applications:	Mergers and acquisitions

Topic 6: Risk and the Cost of Capital

Read:	Chapter 10: Risk and Return Chapter 11: Portfolio Choice and Diversification
Prepare:	Case: Partners Healthcare
Concepts:	Expected return, Stock volatility, Risk-return tradeoff, Portfolio risk, Diversification, Equity market integration, Mean-variance frontier, Minimum variance portfolios, Short sales, Leverage, Sharpe ratio
Applications:	Portfolio management
Of Interest:	Portfolio Optimizer and Instructions (on the course website)

Topic 7: Market Pricing of Risk

Read:	Chapter 12: Capital Asset Pricing Model
Prepare:	Case: Cost of Capital at Ameritrade
Concepts:	Capital market line Security market line, Beta, Market risk, Volatility, Estimating beta, Alpha, Security mispricing, Efficient portfolios
Applications:	Portfolio management, Capital budgeting

Topic 8: Corporate Capital Structure

Read:	Chapter 14: Capital Structure in a Perfect Market, Chapter 15: Debt and Taxes Chapter 16: Financial Distress, Incentives, and Information Chapter 17: Payout Policy (optional)
Prepare:	Case: Blaine Kitchenware Inc.
Concepts:	Leverage, Modigliani and Miller Irrelevance Propositions, Weighted Average Cost of Capital (WACC), Arbitrage, Equity issuance dilution fallacy, Earnings per share (EPS) fallacy, Market Imperfections, Interest Tax Shields, Bankruptcy, Bankruptcy costs, Direct and indirect costs of financial distress, Tradeoff theory, Valuation with leverage, Adjusted Present Value (APV), Project specific risk, Incentives and agency costs, Debt overhang, Overinvestment, Information asymmetry and security mispricing, Signaling, Announcement Effects, Initial public offerings (IPOs), Personal taxes
Applications:	Industry capital structure, Optimal capital structure, Refinancing

Topic 9: Risk Management

Read:	Chapter 30: Futures and Forwards (§ 30.2, 30.3) Chapter 20: Financial Options (§ 20.1-20.2)
Prepare:	Case: Hedging Currency Risks at AIFS
Concepts:	Price-Fixing Contracts, Forwards, Futures, Swaps, Price-Insurance Contracts, Options, Basis Risk, Covered interest parity, European Options, Option premia
Applications:	Hedging currency risk via futures and options, Value creation via hedging

Topic 10: Financial Option Valuation

Read:	Chapter 20: Financial Options (§ 20.3-20.5) Chapter 21: Option Valuation
Prepare:	Case: Retaining Top Talent
Concepts:	Portfolio insurance, Put-Call Parity, American Options, Binomial Option Pricing Model, Black-Scholes Formula, Implied volatilities, Option Sensitivities (Greeks)
Applications:	Employee Stock Option (ESO) Valuation
Downloads:	Options Calculator (on the course website)

Topic 11: Real Options

Read:	Chapter 21: Review Option Valuation (§ 21.1-21.2) Chapter 22: Real Options (§ 22.1-22.5)
Prepare:	Case: When to Build
Concepts:	Option to delay, Option to expand, Option to abandon
Applications:	R&D Staging

Topic 12: Further Applications

Prepare:	Case: Twitter IPO Case: Priceline Acquisition of OpenTable (or LBO)
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Syllabus FNCE 604

■ Overview

This pre-term course is intended for those students wishing to prepare for the *Placement Exam* to get into FNCE 612. The FNCE 612 course will fulfill the core requirement in finance in half a semester, instead of the usual full semester course, FNCE 611. Since the pace of FNCE 604/612 is fast¹, only students with prior knowledge of finance (either by coursework or by practical experience) or with strong analytical backgrounds should consider taking this course sequence.

Together, FNCE 604 and FNCE 612 form the foundation for subsequent courses in corporate finance, corporate valuation, investments, and financial derivatives. Their purpose is to develop a framework for analyzing a firm's investment and financing decisions. This course, FNCE 604, will provide an introduction to present value, capital budgeting under certainty, and bond/stock valuation. The FNCE 612 course will start where FNCE 604 stops, and will cover risk and return, capital budgeting under uncertainty, the efficiency of capital markets, the capital structure and payout policy of the firm, and options.

Since the emphasis is on the fundamental concepts underlying modern finance, the approach will be analytical and rigorous, and requires familiarity with accounting, mathematical and statistical tools. This “academic” approach is necessary to provide you with a strong foundation for the (more applied) elective courses at Wharton.

■ Prerequisites

Although there are no official prerequisites for FNCE 604 and FNCE 612, both courses will make use of mathematical and statistical manipulations at the level taught in the pre-term course. In particular, knowledge of calculus is not at all necessary for this course, nor is it for the Placement Exam or FNCE 612. Finally, some basic familiarity with Excel will be assumed for both FNCE 604 and FNCE 612.

■ Course Material

The textbook for FNCE 604/612 (and for FNCE 611) is:

- Berk, Jonathan, and Peter DeMarzo, *Corporate Finance*, 3rd edition, Pearson: Boston.
(Referred to as **BD** below)

The textbook should be purchased with the option to access the web platform offered by Pearson, called MyFinanceLab². Although this web platform is optional for FNCE 604, it will be used for homework assignments and course grading in FNCE 612 (and FNCE 611). Note that, if you prefer a soft copy of this textbook, Pearson also makes it available in digital format at [www.pearsonhighered.com/berk demarzo](http://www.pearsonhighered.com/berk_demarzo).

1 The pace of FNCE 604/612 will be about 35-40% faster than that of FNCE 611.

2 It is also possible to subscribe to MyFinanceLab separately, if the book does not come with access to it.

The rest of the material for the course will be made available only electronically. In particular, my notes for every lecture will be available on Canvas at least one day in advance. It is your responsibility to bring a printed or electronic copy with you in class. Additional materials will also be made available on Canvas. They will include problem sets (and their solutions), practice exams (and their solutions), spreadsheets, and other useful handouts.

■ Grading and Exam Schedule

As the course is only a preparatory course for the Placement Exam, it will not be graded. In fact, students are allowed to take the Placement Exam even if they choose not to take this course. The Placement Exam will allow students to place into FNCE 612. This will be an open-book exam; that is, you can use your notes and the textbook. You can also use a calculator, but email-capable devices (laptops, tablets, cell phones, etc.) will not be allowed.

The Placement Exam also constitutes the first half of the Waiver Exam. The second half of the Waiver Exam will follow the Placement Exam and will cover the material taught in FNCE 612. If you are aiming to waive the entire core course in finance, you must complete both parts of the exam. If you are only aiming to place into FNCE 612, you can leave after the Placement Exam (i.e., the first half of the Waiver Exam).

The two halves of the exam are graded separately. Thus, it is possible to fail the Waiver Exam overall but do sufficiently well in the first half to pass the Placement Exam and qualify for FNCE 612. Conversely, good performance in the second half of the Waiver Exam does not facilitate placement into FNCE 612.

■ Class Etiquette and Code of Conduct

I do not grade attendance nor participation as I trust students to attend and contribute where appropriate. Particularly for an accelerated course, it is essential to (a) attend class in order to absorb the material, and (b) ask questions if anything in the lecture is unclear. While I am flexible regarding the above, I expect classroom conduct to be on a high level. Students should arrive on time for class and remain until the class is completed. **During class it is not acceptable to use cell phones or send text messages, leave temporarily to get coffee or make a call, do other work, or use laptop computers for any reason other than to take notes.**

Although it should go without saying, I fully expect you to adhere to the school's Code of Academic Integrity (www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html). In particular, the use of past problem set solutions or past exams (except when distributed by the instructor) is expressly forbidden. Any violation of this code, such as cheating in any form, will be treated with severity.

■ Preparing for Classes

The material for this course (and for FNCE 612) needs to be absorbed consistently. As the course progresses, students should work on the problem sets distributed on Canvas and, optionally, on

the textbook problems that I will recommend from MyFinanceLab. Even though these problems are not formally graded in FNCE 604 (they will be in FNCE 612), they are an integral part of the course and it is insufficient to just attend lectures for a full understanding of the material. The Placement Exam will systematically include questions that are very similar to the recommended problems.

Since I will move at a fast pace, it is recommended that you read up on the lecture notes ahead of time. Students are also encouraged to read from the BD textbook the chapters/sections relevant to the material covered (and to be covered) in class.

■ Canvas

The course website on Canvas contains the material for FNCE 604 as well as the most updated information and announcements for the course. This website is the information center for the course. Please check the course website regularly.

■ MyFinanceLab

Although access to MyFinanceLab will be required for FNCE 612 (and FNCE 611), it is optional for FNCE 604. For FNCE 604, access to MyFinanceLab will allow you to work on some extra textbook problems that I will recommend for every topic. That is, if you feel that the problem sets available on Canvas are not quite sufficient to prepare for the Placement Exam, you have the option to work on a few extra problems online.

■ Calculators and Computers

You will definitely need a calculator for the course (and the Placement Exam). Any calculator that has a y^x button will do. In fact, when constructing the exam, I will make sure that the people who do not have a fancy calculator are not at a disadvantage. Financial calculators are not necessary for this or subsequent finance courses at Wharton. However, if you would like to acquire one, consider buying an HP-17BII, HP-19BII, or their subsequent models. Finally, please note that email-capable devices (like laptops, tablets, cell phones, and so on) will not be allowed for the Placement Exam.

Course Outline FNCE 604

The material for this course essentially corresponds to chapters 3-9 of the BD textbook. Below is the sequence of topics that will be covered in class, along with the relevant chapters/sections in BD.

Session 1. Time Value of Money

Readings: BD: Sections 3.1-3.3, chapter 4, sections 5.1-5.3.

Topics: Introduction to financial decision-making, compounding and future value, discounting and present value, the concept of net present value, more frequent compounding, effective annual rate, nominal and real rates.

Session 2. Investment Decisions and Capital Budgeting

Readings: BD: Sections 7.1-7.4, chapter 8.

Topics: The goal of the firm and the net present value (NPV) rule, using the NPV rule for capital budgeting, other capital budgeting considerations, alternatives to the NPV rule.

Session 3. Bond and Stock Valuation

Readings: BD: Sections 6.1-6.3, sections 9.1-9.4.

Topics: Term structure, forward rates, bonds, no-arbitrage pricing, dividend-discount model, investment and growth, terminal values and multiples.

***Disclaimer:** This document represents my current plans for the course at the time of writing, but is subject to change. Any changes will be communicated promptly and clearly to the students.*

Syllabus FNCE 612

■ Overview

This course is intended for students with prior knowledge of finance or with strong analytical backgrounds. Together with the pre-term preparation course (FNCE 604), it forms the foundation for subsequent courses in corporate finance, corporate valuation, investment, and financial derivatives. Its purpose is to develop a framework for analyzing a firm's investment and financing decisions. The course will start where FNCE 604 ends. More precisely, it will provide an introduction to the relationship between risk and return, capital budgeting techniques under uncertainty, the operation and efficiency of capital markets, the optimal capital structure and payout policy of the firm, and options. In short, it will cover all the topics of a typical semester-long finance introduction class in six weeks.¹

While the course does not concentrate exclusively on theory, the basic theoretical underpinnings of the various topics will be formally discussed as they are necessary for competent financial analysis. The course emphasizes the development of problem-solving skills based on a good understanding of general principles that can accommodate the constantly evolving nature of the business environment. Because of the practical importance of the material and as an illustration of the relevant theory, several examples and applications will be discussed throughout the course.

■ Prerequisites

The course assumes that students are familiar with the material covered in FNCE 604, and will often make use of this material. No time will be spent reviewing it. As a result, FNCE 612 is available only to those students who placed into it based on past credentials or by successfully passing the Finance Placement Exam.²

The course makes use of mathematical and statistical manipulations at the level taught in the pre-term "Math for Business" course (STAT 611). Although the first section of the notes in FNCE 612 will include a review of the statistics material that will be used throughout the course, very little class time will be spent on it. Finally, as in FNCE 604, some basic familiarity with Excel will be assumed for FNCE 612.

■ Course Material

The textbook for the course is:

- Berk, Jonathan, and Peter DeMarzo, *Corporate Finance*, 3rd edition, Pearson: Boston.
(Referred to as **BD** on the course outline)

¹ Of course, since FNCE 604 has already covered some of the material studied in a typical finance introduction class, the pace of FNCE 612 will effectively be about 35-40% faster than that of FNCE 611.

² Students who placed into the course by credentials should make sure that they are still comfortable with all the topics covered in FNCE 604.

The textbook should be purchased with the option to access the web platform offered by Pearson, called MyFinanceLab.³ This web platform will be used for homework assignments and course grading. Note that, if you prefer a soft copy of this textbook, Pearson also makes it available in digital format at www.pearsonhighered.com/berkdemarzo.

To show you how the concepts developed in class can be applied to the real world, we will cover a number of cases throughout the course. These cases will be available through Study.Net (www.study.net), which is itself accessible through Canvas.

The rest of the course material will be made available only electronically. In particular, the notes for every lecture will be available on Canvas at least one day in advance of each class. It is your responsibility to bring a printed or electronic copy with you in class. Additional materials will also be made available on Canvas. They will include additional problem sets (and their solutions), practice exams (and their solutions), spreadsheets, and other useful handouts.

■ Grading

By default, the course grade will be based on two exams (75%), three mini-case reports (15%), and one final case report (10%). Students will also have the option to work on periodic individual homework assignments that will be factored into their grade.⁴ By default, the midterm and final exams will account for 1/3 and 2/3, respectively, of the exam weight of 75%. However, the entire exam weight will be put on your final exam if your performance in it exceeds that on your midterm exam.

The midterm exam will test the material already covered up to that point. The final exam is comprehensive; that is, it will test the material for the entire course. Both exams will be open-book exams, i.e., you can consult the course materials while taking them. The material covered in FNCE 604 will not be directly examined again in FNCE 612. Of course, we will still need to use many of the tools developed in that course (e.g., annuity formulas, NPV rule, free cash flows, etc.). The exact material covered in each of the two exams will be announced in class.

The medians of the midterm and final exams will be standardized so that they are equal. For example, if the midterm and final have medians of 85 and 75 respectively, 5 points will be subtracted from all midterm scores and 5 points will be added to all final scores so that both exams have a median of 80. This is to ensure that a sufficient number of students end up with a better score in the final than the midterm and therefore benefit from the weighting system, even if the final turns out to be difficult. The grades on the case reports and homework assignments will not be adjusted.

Individual homework assignments will be assigned periodically from MyFinanceLab, Pearson's website for the textbook by Berk and DeMarzo. The site can be accessed from the following address: www.pearsonmylabandmastering.com. Each of six assignments is to be completed before 11:55 p.m. every Sunday.

³ It is also possible to subscribe to MyFinanceLab separately, if the book does not come with access to it.

⁴ More information about the cases and individual homework assignments is provided below.

Each assignment is optional and will potentially count for 3% of your total (midterm and final) exam score. More specifically, the total weight given to your two exams will be reduced by your total score on these six assignments. For example, if you get 2/3, 3/3, 3/3 and 2/3 on the first four and choose not to work on the last two, then your two exams will count for $75\% - 2\% - 3\% - 3\% - 2\% = 65\%$ of your final grade, and I will add 10% to it to get to 75%.

Your letter grade for the course will be based on your ranking in the course (curve), and on performances/scores that I consider reasonable for this course.

■ Make-up Exams

There will be **absolutely no make-up exam** for the midterm exam. If a student cannot take or even chooses not to take the midterm exam, the final exam will count for the entirety of the exam weight in his/her final grade. There is no need to notify the instructor in that event. That said, it is strongly recommended that you prepare for and take the midterm exam if you can.

Students who, for some reason, cannot attend the final exam will either be allowed to take the same exam early (upon signing an honor agreement that they will not disclose its content), or a different exam later, depending on the circumstances. To be clear, this will only be considered for **extraordinary circumstances**, as judged by the instructor.

If extraordinary circumstances prevent a student from attending the final exam, it is his/her responsibility to notify the instructor before the exam or, if impossible, as quickly as possible after the exam. Please note that, as per Wharton policy, traveling, interviews and job-related absences are not considered to be extraordinary circumstances. In the case of illness, a signed doctor's note must be provided.

■ Regrading Policy

Regrade requests for the midterm and final exams must be made within one week after the graded exams are distributed back to students. All such requests must be made in writing. Hard copies of the exam and the request will then be forwarded to the TA who graded the question(s) to be regraded. **The TA's decision is final and may not be appealed.** In making your requests, keep in mind that the whole exam is potentially subject to regrading.

■ Cases

Preparation for the cases is done in groups of five or six students, all from the same section of the course. Students will be randomly assigned to teams by the instructor.

A total of five mini-cases will be discussed in class.⁵ The exact dates of the various case discussions will be announced as the course progresses. For each mini-case, teams are expected to prepare a short PowerPoint presentation and submit it by 11:55 p.m. on the day before the class discussion.

⁵ They are listed in the Course Outline below.

These presentations should not exceed **four slides**; a cover page/slide is not required, as long as the team number and team members' names appear somewhere on the first slide and/or in the footer on each slide.

For each class discussion, one team will be picked randomly to present their slides (they will have five minutes to do so), and one other team will be asked to initiate the discussion following this presentation. The presentations and discussions will be factored into the teams' performance on these mini-cases. Note that the first case (The State of South Carolina) will be used as practice and will not be graded. Note also that, of the other four mini-cases, only the top three will count towards a team's mini-case performance.

The course will end with a wrap-up class discussion revolving around one more case: Harris Seafoods, Inc. This "final case" is meant to provide students with an overview of many of the topics covered in FNCE 604/612. Specifically, every team will be required to submit one pdf file that includes three to five pages of text, and an appendix for supporting material (such as figures and tables). Every team will also be required to submit the Excel spreadsheet that contains their analysis. All students should come to this last class ready to discuss issues relevant to the case.

■ Supplementary Problem Sets

In addition to the team cases and individual assignments, supplementary problem sets (and their solutions) will be distributed via Canvas throughout the term. These problem sets are structured to reinforce the major themes in the course material and to provide students with extra practice for the two exams. Write-ups for these problem sets will not be collected or graded.

■ Class Etiquette and Code of Conduct

I do not grade attendance nor participation as I trust students to attend and contribute where appropriate. Particularly for an accelerated class, it is essential to (a) attend class in order to absorb the material, and (b) ask questions if anything in the lecture is unclear.

Students should attend the section of the course for which they are registered, especially on days that include a case discussion. When a conflict is unavoidable, students can attend another of my sections without notifying me. If it is impossible to make any section on a given day, you may miss class without notifying me, and are trusted to catch up on the material in your own time.

While I am flexible regarding the above, I expect classroom conduct to be on a high level. Students should arrive on time for class and remain until the class is completed. **During class it is not acceptable to use cell phones or send text messages, leave temporarily to get coffee or make a call, do other work, or use laptop computers for any reason other than to take notes.**

Although it should go without saying, I fully expect you to adhere to the school's Code of Academic Integrity (www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html). In particular, the use of past problem set solutions or past exams (except when distributed by the instructor) is expressly forbidden. Any violation of this code, such as cheating in any form, will be treated with severity.

■ Preparing for Classes

The material for this course needs to be absorbed consistently. As the course progresses, students should work on the problems that I will assign from MyFinanceLab and, optionally, on the supplementary problem sets that I will make available. These problems are an integral part of the course and it is generally insufficient to just attend lectures for a full understanding of the material. The two exams will include questions that are very similar to these problems.

Since I will move at a fast pace, it is recommended that you read up on the lecture notes ahead of time. Students are also encouraged to read from the **BD** textbook the chapters/sections relevant to the material covered (and to be covered) in class.

■ Canvas

The course website on Canvas contains the material for FNCE 612 as well as the most updated information and announcements for the course. This website is the information center for the course. Please check the course website regularly.

■ Teaching Assistants

Several Ph.D. students and 2nd-year MBA students will be assisting me in this course. Their names, functions and schedules will be posted on Canvas and announced in class.

■ Calculators and Computers

You will definitely need a calculator for the course (and the two exams). Any calculator that has a y^x button will do. In fact, when constructing the exam, I will make sure that the people who do not have a fancy calculator are not at a disadvantage.

Financial calculators are not necessary for this or subsequent finance courses at Wharton. However, if you would like to acquire one, consider buying an HP-17BII, HP-19BII, or their subsequent models. Finally, please note that email-capable devices (like laptops, tablets, cell phones, and so on) will not be allowed for the two exams. Unfortunately, this also means that it will be impossible to consult digital versions of the textbook during the exams.

■ Semester Deadlines

Students are allowed to drop the course (and join FNCE 611) during Wharton's official drop/add period. Students who choose to join the FNCE 611 course are encouraged to promptly contact the instructor in that course to make sure that they have not missed any deadlines.

Course Outline FNCE 612

The material for this course essentially corresponds to chapters 10-18 and 20-21 of the **BD** textbook. Below is the sequence of topics that will be covered in class, along with the relevant chapters/sections in **BD**. *Note that the first four modules of the FNCE 604/612 sequence were covered during the pre-term.*

Module 5 – Risk and Return: Measurement

Readings:	BD: Sections 10.1-10.4 and 10-6; sections 11.1-11.3
Topics:	Returns as random variables; mean, variance, and covariance of returns; using historical returns; diversification
Mini-Case:	The State of South Carolina

Module 6 – Risk and Return: Capital Asset Pricing Model

Readings:	BD: Sections 11.4-11.8; sections 12.1-12.3
Topics:	Portfolio risk and return; portfolio choice and Sharpe ratios; equilibrium and the market portfolio; the Capital Asset Pricing Model (CAPM); estimating beta
Mini-Case:	Alex Sharpe's Portfolio

Module 7 – Cost of Capital

Readings:	BD: Sections 12.4-12.5
Topics:	Debt, equity, and the cost of capital; comparable firms, leverage, and asset betas; cost of capital for a division or project
Mini-Case:	Cost of Capital at Ameritrade

Module 8 – Market Efficiency and Asset Management

Readings:	BD: Chapter 13
Topics:	Index investing; average abnormal return and performance evaluation; market efficiency and active portfolio management; multifactor models and hedge funds; behavioral finance
Mini-Case:	Ballis's Benchmark A&B

Module 9 – Capital Structure

Readings:	BD: Chapter 14; chapter 15; sections 16.1-16.5
Topics:	Capital structure in a perfect capital market; the role of corporate taxes; the role of personal taxes; the trade-off theory
Mini-Case:	Blaine Kitchenware, Inc.: Capital Structure

Module 10 – Payout Policy

Readings:	BD: Sections 17.1-17.6
Topics:	Dividends and share repurchases; the role of taxes; tax clienteles; the signaling role of payout policy; the effects of agency costs

Module 11 – Valuation

Readings: **BD:** Sections 18.1-18.3 and 18.5.
Topics: Weighted average cost of capital; adjusted present value.
Case: Harris Seafoods, Inc. (to be covered in the course's last class)

Module 12 – Options

Readings: **BD:** Sections 20.1-20.4; sections 21.1-21.4.
Topics: Financial options; payoffs at maturity; binomial option pricing; the Black-Scholes formula.

***Disclaimer:** This document represents my current plans for the course at the time of writing, but is subject to change. Any changes will be communicated promptly and clearly to the students.*

Macroeconomics and the Global Economic Environment (FNCE 613/615)

■ Course Description

The purpose of Macroeconomics is to train students to think systematically about the current state of the economy and macroeconomic policy, and to be able to evaluate the economic environment within which business and financial decisions are made. The course emphasizes the use of economic theory and data to understand the workings of financial markets and the operation and impact of government policies. Specifically, the course studies the determinants of national income, employment, investment, interest rates, the supply of money, inflation, exchange rates, and the formulation and operation of stabilization policies.

■ The Macroeconomics and the Global Economic Environment (FNCE 613/615) Waiver Process

Waivers are not encouraged in macroeconomics since the past mastery of tools is considered only part of receiving a well-rounded macroeconomic education. Much of the course time is spent on analyzing current events, financial markets, and major policy issues. Even students who already have had substantial training in economics have found the classes rewarding since they focus on current economic problems. International students, in particular, have found the emphasis on American markets and institutions to be unique and unlike the material covered in their previous courses.

WAIVING BY EXAM

EXAM DATE: Waiver and Placement Exam Schedule, and sample course exams with solutions can be found in the Waiver Exam Guide.

The Finance Department recognizes that many students enter the MBA program with strong backgrounds in macroeconomics and/or corporate finance. Nonetheless, before permitting them to waive the core courses, we want to verify their mastery of these subjects on a waiver exam.

Students who score sufficiently well on the Macroeconomics waiver exam will be granted waivers for both the full-semester version (FNCE 613) and, of course, the half-semester version (FNCE 615). Students who score somewhat less well, but demonstrate substantial mastery of the subject can waive FNCE 615, but not FNCE 613.

Please note that a waiver for FNCE 615 will not be sufficient to enable a student to become a Finance major.

Exam Preparation

Macroeconomics (eighth edition), by Andrew B. Abel, Ben S. Bernanke, and Dean Croushore, Addison-Wesley Publishing Co., 2014.

PLEASE NOTE: FNCE 613 is taught by several faculty members, thus there is variation in the course content. The following four syllabi and course outlines show the variations in the course content.

Syllabus-1 FNCE 613

■ Overview

Finance 613 is a course in macroeconomic analysis and policy in the context of globally integrated economies.

Its purpose is to train students to think systematically about the current state of the economy and macroeconomic policy, and to be able to evaluate the economic environment within which business and financial decisions are made. The course emphasizes the use of economic theory to understand the workings of financial markets and the operation and impact of government policies. Specifically, we study the determinants of the level of national income, employment, investment, interest rates, the supply of money, inflation, exchange rates, and the formulation and operation of stabilization policies. The exact structure of the class and topic coverage will be linked to the current economic issues around the world.

■ Course Materials and Information

COURSE SITE

Our Canvas site will contain all lecture notes and other additional readings, useful links, and general course information. This is also a useful hub to start and participate in course-related discussions. The site is linked to <http://spike.wharton.upenn.edu/courses/>. If you need a Wharton account you can apply online at <http://accounts.wharton.upenn.edu>.

TEXTBOOK

There are several good textbooks covering the core theoretical concepts in macroeconomics at an intermediate level. The best, which I recommend, is *Macroeconomics*, 8th edition, by Abel, Bernanke and Croushore. Although this is an excellent text in macroeconomic theory, our classroom discussions and notes often cover more applied topics and are guided by current events around the world.

ADDITIONAL READINGS

The Wall Street Journal, *The Financial Times*, and *The Economist* are all world-class publications that offer many insightful discussions about the global economy. You are encouraged to subscribe to one of them or find an alternative source of similar quality. Occasionally we may use articles from these or other business newspapers and economic research centers around the world to the list of required readings during the term.

PROBLEM SETS AND QUIZZES

There will be weekly quizzes. They can be accessed and submitted on Canvas. Due dates are also posted on Canvas.

Students are encouraged to work out the answers to the numerical problems at the end of each chapter of the recommended textbook and to go through the formal exercise of writing the answers. Recommended problems and their answers are available on Canvas.

■ Grades

COMPOSITION

The final grade breakdown for this course is as follows:

Quizzes	30%
Case Discussions	20%
Final Exam	50%

Attendance is not required but it is hard to participate without being present.

The final exam is **comprehensive**. You will be able to bring one double-sided sheet with notes and one calculator.

SCHEDULING CONFLICTS

This class is offered in the Spring Semester. Therefore if you have a conflict with the date for the Final Exam you should drop the class now. Any additional conflicts will be resolved according to the *MBA Resource Guide*. Specifically:

- If you find yourself with a conflict due to your career search or recruiting activity, you should **work with the MBA Career Management Office** to find a resolution
- **You should never approach your instructors with requests to reschedule exams or to make special accommodations**

EXAM REVIEW

Any requests for a review of an exam must be submitted in writing within **7 days** from the date that exams are made available and must be accompanied by the *Statement of Honesty in Regrade Request* form posted on Canvas.

Course Outline - 1 FNCE 613

Session 1. Background: World Economy Today

Readings: Ch. 1

Session 2. Measuring Macroeconomic Performance: Income

Readings: Sec. 2.1-2.3

Session 3. Measuring Macroeconomic Performance: Prices

Readings: Sec. 2.4

Session 4. The Core Macroeconomic Model

Readings: Sec. 3.1; FRB/US Model

Session 5. Household Consumption and Savings

Readings: Sec. 4.1, 4.A

Session 6. Corporate Investment

Readings: Sec. 4.2, 2.5

Session 7. Budget Deficits and Interest Rates

Readings: Sec. 15.1, 4.3

Session 8. International Trade and Finance

Readings: Sec. 5.1

Session 9. Sources of Trade Deficits

Readings: Sec. 5.2-5.5

Session 10. Money and Inflation

Readings: Sec. 7.1-7.3, 7.5

Session 11. Money and Financial Markets

Readings: Sec. 7.4

Session 12. Discussion: Financial Market Valuation

Session 13. The Labor Market

Readings: Sec. 3.1-3.4

Session 14. Labor Frictions and Unemployment

Readings: Sec. 3.5-3.6, 11.1

Session 15. General Macroeconomic Equilibrium

Readings: Sec. 9.1-9.3

Session 16. Understanding Business Cycles

Readings: Sec 8.1, 9.4-9.6

Session 17. Monetary Policy and Institutions

Readings: Ch. 14

Session 18. Macroeconomics in an Open Economy

Readings: Sec. 13.1-13.4

Session 19. Discussion: Spain's Debt Crisis

Readings: Spain Case

Session 20. Fixed Exchange Rates

Readings: Sec. 13.5

Session 21. A Brief History of Economic Cycles

Readings: Sec. 8.2-8.3

Session 22. Discussion: World Economic Outlook

Readings: IMF World Economic Outlook (Ch. 2)

Session 23. Long Run Growth

Readings: Ch. 6

Session 24. Discussion: The Fiscal Outlook

Readings: Sec 15.3, CBO Budget Outlook, IMF Fiscal Outlook

Syllabus-2 FNCE 613

■ Overview

Finance 613 is a course in macroeconomic analysis and policy in the context of globally integrated economies. The course begins by introducing national income accounts for an open economy and then focuses on a classical analysis of labor markets, goods markets, and asset markets. This part of the course examines the determination of employment, output, prices, wages, interest rates, national saving, investment, and international flows of goods, services, and assets in the long run. Then the course shifts its focus to the study of business cycles. The analysis of business cycles begins with a description of the cyclical behavior of various economic variables. This cyclical behavior motivates the development of business cycle models and the application of these models to study monetary and fiscal policy. The analytic engine of this part of the course is the IS-LM model, which is applied in both a classical mode and a Keynesian mode. The course extends the classical and Keynesian IS-LM models to models of large open economies with flexible exchange rates to study the international transmission of business cycles. The course concludes by analyzing the conduct of monetary and fiscal policy in a rich institutional framework.

■ Lectures

Each lecture is one hour and twenty minutes. Most lectures are divided into two parts. The first hour is devoted to discussion of core analytic material, and the final twenty minutes are devoted to a current policy topic.

■ Course Materials

CANVAS

The Canvas site for this course contains the syllabus, lecture notes, problem sets and answers, old exams, regrade request forms, TA office hours, and other useful links.

READING MATERIALS

The textbook for this course is *Macroeconomics* (eighth edition) by Andrew B. Abel, Ben S. Bernanke, and Dean Croushore, Addison-Wesley Publishing Co., 2014. The textbook will be available to you in two alternative formats that are substantially less expensive than a traditional bound book. (format 1): The e-text version, which is directly available from Pearson at www.pearsonmylabandmastering.com/northamerica/. This format of the book also includes MyEconLab. To register for MyEconLab for this course, which provides access to the e-text version of the textbook, you will need the following course ID: abel74378. (format 2): Student Value Edition (SVE) is a looseleaf version of the book. It will be available at the bookstore.

There is an optional bulkpack for the course that is available from Study.Net. The bulkpack contains the lecture notes for the core analytic material. It is optional because these notes are also available from Canvas.

Handouts for current policy topics will be distributed in class each day and will be made available on Canvas as the term progresses. You will be charged for these handouts via the bursar-billed handout fee from Reprographics.

OPTIONAL PROBLEM SETS

Canvas contains suggested problems and answers arranged by textbook chapter. Most of the questions are taken directly from the textbook. In addition, for most chapters Canvas contains one or two questions that are not in the textbook. Unlike the Quizzes/Graded Homeworks discussed below, the problem sets are *optional* and will NOT be collected and graded.

■ Grades

Your course grade will be based on your performance on the midterm and final exams, the Macro Policy Simulation, and Quizzes/Graded Homework.

■ Exams

There will be one midterm exam and a final exam. The exams will be **closed-book and closed-note**. You may bring a single double-sided “cheat sheet” (no larger than 8.5” x 11”) to the midterm exam, and you may bring two double-sided “cheat sheets” (again no larger than 8.5” x 11”) to the final exam. The final exam will be **cumulative over the material from the entire course**.

SCHEDULE OF EXAMS

The midterm exam will be 90 minutes in length. The final exam will be two hours in length and will be given during the final exam period as scheduled by the registrar.

Students should take note of the following paragraphs from the Academic Policies section of the *MBA Resource Guide* (www.wharton.upenn.edu/mbaresource/misc/academic-policies.cfm), specifically the section on Examination Policies:

“If you have documentable special circumstances such as time conflicts between multiple exams, illness, or grave personal difficulties such as a death in the family, you should petition the MBA Program Office, which will work with the faculty in appropriate cases to find a resolution. The MBA Program Office will require documentation of your conflict as a matter of course. See the University website (Pennbook) for policies covering absences resulting from religious observances. **You should never approach your instructors with requests to reschedule exams or to make special accommodations.**

If you find yourself with a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Employers cannot require a student, as a condition of his or her employment candidacy, to participate in recruiting-related activities at a time that conflicts with his or her academic schedule. An employer’s inflexibility on this issue is considered a violation of

Wharton's recruiting policies. **A time conflict due to a job interview, a career pursuit or travel is not an appropriate reason to request accommodation on an academic commitment."**

REGRADING OF EXAMS

Any requests for regrading of exams must be submitted in writing **within one week** from the date that exams are returned in class, and must be accompanied by the *Regrade Request* form and *Statement of Honesty in Regrade Request* form, which are available on Canvas. The one-week period for submission of exams for regrading begins on the date that the exams are returned in class, not on the date that you pick up the exam, if for some reason you are absent from class the day the exams are returned. If you miss the class during which the exams are returned, it is **your responsibility** to pick up your graded exam within the one-week period. Requests for regrading must be very specific. Do not mark or make notes on your exam, and do not alter in any way the answers to the questions. **Such alterations will be construed as violations of the Code of Academic Integrity and may be referred for disciplinary action.** When you request a regrade, I retain the right to regrade your entire exam. Please be aware that your exam score may fall as a result of regrading, if I determine that you received too many points for the question(s) you identify, or for other questions on the exam.

■ Macro Policy Simulation

We will have a Macro Policy Simulation. The Macro Policy Simulation will be conducted as a tournament. Winning teams will receive bonus points on the final exam and will be asked to discuss their decisionmaking process.

■ Quizzes/Graded Homework

Quizzes/Graded Homework are on Canvas under the "Quizzes" tab on the left. Because they are graded exercises, you must work on these quizzes/graded homeworks alone. When you take these quizzes, you can use any written material from the course and you can use a calculator or computer, **but you cannot communicate in any way with any of your classmates or any other person.**

■ Course Grade

The course grade has an exam component and a quizzes/graded homework component. The exam component of the grade, which is based on the midterm exam and the final exam, counts for 90% of the course grade. The quizzes/graded homework component of the grade counts for 10% of the grade.

The exam component of the grade will be calculated as follows: The midterm exam will count as one grade and the final exam (including bonus points from the Macro Policy Simulation) will count as two grades. The lowest grade among these three grades will be dropped. The policy of dropping the lowest exam grade provides insurance against having a bad day or against being unable to attend the midterm exam. Because this insurance is being provided to you, there will be **NO MAKE-UP EXAM FOR THE MIDTERM EXAM FOR ANY REASON.** If you miss the midterm exam for any reason

whatsoever, then you can simply use your insurance policy to drop that exam; in that case, the exam component of your course grade will be based solely on the final exam.

The quizzes/graded homework component will be calculated as follows: The lowest quiz/graded homework grade will be dropped. The quiz/graded homework component will be based on the remaining quizzes/graded homeworks.

■ Ethics Matrix

	Materials							People				
	Approved calculator	Laptop / other electronics	Summary sheet	Current book / class notes	Past notes / summaries	Past exams / assignments	Internet content / other outside materials	Learning team / approved work team	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term	Person outside of Wharton
MacroSim	A	A	A	A	A	A	A	W	W	W	W	W
Quizzes/Homeworks	A	A	A	A	A	A	A					
Exam Prep	A	A	A	A	A	A	A	W	W	W	W	W
Midterm & Final Exams	A		A									

A = Allowed material W = Allowed to work together Shaded Cell = Not allowed
 D = Discussion of general concepts and procedures is allowed but no sharing of specific answers.

The information above covers many common situations but will not cover every circumstance. Remember: The **Wharton MBA Code of Ethics** that you accepted requires, among other things, that you represent yourself and your work honestly, don't try to gain unfair advantage over other students, follow the instructor's guidelines and respect confidentiality of your work and the work of others.

Should you have questions, please contact your ethics liaison or professor.

Course Outline-2 FNCE 613

Details of this outline are subject to change, as announced in class and posted on Canvas.

Session 1. Introduction and Overview

Reading: Ch. 1
Current policy topic: Macroeconomic Data Sources

Session 2. National Income Accounting

Reading: Ch. 2
Current policy topic: Interpreting GDP Releases

Session 3. Production and Employment

Reading: Ch. 3, Secs. 1, 2, 4
Current policy topic: Minimum Wage

FOCUSED INTERVIEW PERIOD – NO CLASS

Session 4. Labor Supply and Unemployment

Reading: Ch. 3, Secs. 3, 5, 6
Current policy topic: Jobless Recoveries

Session 5. Consumption and Saving: Basic Analytics

Reading: Ch. 4, pp. 103-111; App. 4.A pp. 149-157)
Current policy topic: The Future of Social Security

Session 6. Consumption and Saving: Using the Basic Analytics

Reading: Ch. 4, pp. 111-120; App. 4.A, pp. 157-163
Current policy topic: Tax Incentives to Saving

Session 7. Investment and Goods Market Equilibrium

Reading: Ch. 4, Secs. 2 - 3
Current policy topic: Is There a New Industrial Revolution?

Session 8. A Framework for the Open Economy

Reading: Ch. 5, Secs. 1 - 2
Current policy topic: Outsourcing

Session 9. Saving, Investment, and the Current Account

Reading: Ch. 5, Secs. 3 - 5
Current policy topic: Current Account Balances in Mexico and Greece

Session 10. Asset Markets, Money and Prices

Reading: Ch. 7
Current policy topic: Indexed Bonds

Session 11. In-Class Review Session for Midterm Exam

Session 12. MIDTERM EXAM

Q3 CORE FINAL EXAMS – NO CLASS

Session 13. Asset Returns and Prices: Term Structure and Tobin's Q

Current policy topic: Bubbles

Session 14. Business Cycles

Reading: Ch. 8

Session 15. IS-LM Model

Reading: Ch. 9, Secs. 1 - 5

Session 16. Classical and Keynesian Versions of the IS-LM Model

Reading: Ch. 10, Secs. 1 – 2; Ch. 11

Current policy topic: Hyperinflations

Session 17. Aggregate Demand and Aggregate Supply

Reading: Ch. 9, Sec. 6; Ch. 10, Sec. 3

Current policy topic: Forecasts of the Price Level

Session 18. The Phillips Curve: Unemployment and Inflation

Reading: Ch. 12

Current policy topic: Political Business Cycles

Session 19. Exchange Rates

Reading: Ch. 13, Secs. 1 - 2

Current policy topic: Is the Chinese Yuan Undervalued ?

Session 20. Macroeconomic Policy in the Open Economy

Reading: Ch. 13, Secs. 3 - 5

Current policy topic: Monetary Policy in Argentina

Session 21. Monetary Policy and Institutions

Reading: Ch. 14, Secs. 1 - 2

Current policy topic: Taylor Rule

Session 22. Issues in Monetary Policy

Reading: Ch. 14, Sec. 3 and Ch. 15, Sec. 4

Current policy topic: Inflation Targeting

Session 23. Macro Policy Simulation

Session 24. Government Spending and Its Financing

Reading: Ch. 15, Secs. 1 -3

Current policy topic: Outlook for the Federal Budget

In-Class Review Session for Final Exam

FINAL EXAM

Syllabus-3 FNCE 613

■ Overview

This course presents the analysis of macroeconomic theory with a current events perspective. The material in the class concentrates on lecture notes, which are the primary learning source, and readings from a course packet of articles drawn from journals, magazines, newspapers, and other economic publications.

The material covered will include: (1) Economic Statistics, GDP, Price Indices, Productivity and the nature of the business cycle, (2) The government budget and Social Security, (3) Monetary policy, The Fed and other Central Banks, (4) Interest rates – indexed bonds and the term structure, (5) Aggregate Demand and the determination of income and interest rates, (6) Money and Inflation – the Velocity Approach, (7) Reaction of Financial Markets to economic data, (8) Inflation, inflationary expectations and the Phillips Curve, (9) Supply-side shocks and macro-dynamics, (11) International Balance of Payments, the current account and capital flows, (12) Determination of Exchange Rates, exchange rate systems, purchasing power and interest rate parity.

■ Course Materials

Required: Course Pack of Lecture Notes from Wharton Reprographics

Recommended: *Stock for the Long Run*, 5th Edition

■ Problem Sets

Problem sets must be handed in; they are graded and are designed as learning tools. They are more analytical than questions on the exams, although exam questions are often patterned after questions taken from the problem sets. All problems are to be handed in online. Instructions will be forthcoming.

Students may work in groups to solve the problem sets but must hand them in individually. Worksheets cannot be shared. Students violating these rules will be considered to have cheated and will be treated accordingly.

■ Examinations

Examinations are based on understanding and not memorization. All formulas will be provided on the examination sheets. **The examinations are closed book**, except students, if they wish, may bring in notes covering *one, and only one side of an 8 ½ by 11 inch piece of paper* for the midterm and *two sides* for the final examination. **The final examination is cumulative.**

One hand-held calculator may be brought into the examinations. All cell phones and other communications devices must be completely off and stowed. *Re-grade policy found below.*

There will be **no make-ups** for the final examination. Students who know in advance that, because of their schedule, they cannot sit for the--- final examination must drop the course.

■ Grading

There are 200 total points (TP) in the course. Ten percent or 20 points will be allocated to the problem sets (PS) and 90% or 180 points to exams. Of the exams, the midterm (MT) will be 40% (or 72 points) and the final examination (F) will count for 60% (or 108 points).

You cannot do worse than your performance on the final examination.

Total Points (TP) in course will be computed as:

$$TP = \text{Max} [MT, 2F/3] + \text{Max} [PS, 0.185F] + F.$$

Course grade will be based on **total points**.

■ Exam Regrade Policy

Re-grades will only be considered if a student writes in detail on a separate piece of paper why he or she deserves more points on a certain question. Such a request must come after carefully reading and understanding the answers given in the answer sheet for the exam, which will be posted on my website. This explanation must accompany your exam for a regrade.

If any question on the exam is submitted for a re-grade, the ENTIRE EXAM WILL BE RE-GRADED to make sure the proper grade has been given. Therefore it is possible to lose points on other questions even if you gain on the question submitted. For that reason, it usually does not pay to submit for one or two points unless you are confident of all the points allotted on your other questions. A tough grade on one question is often offset by an easy grade on another.

EXAMS RESUBMITTED BECAUSE OF AN ADDING MISTAKE WILL NOT HAVE THE QUESTIONS RE-GRADED.

I have learned that in almost all cases where a student asks for re-grades on 4 or 5 questions this means that the student is “fishing” for more points. I will not be sympathetic to such requests.

Please limit re-grades to those question(s) that you specifically believe have been mis-graded.

As stated above, if any question is submitted for re-grade, the entire exam will be re-graded.

Deadline for submission of re-grades will be *two weeks* following the date of the examination. Re-grade requests can be submitted in class or placed in my mailbox in the Finance Department.

Course Outline - 3 FNCE 613

Sessions 1-2. Financial Crisis, GDP

Session 3. Economic Statistics

DEDICATED INTERVIEW PERIOD

Sessions 4-5. Economic Statistics/Government Budgets

Sessions 6-7. Monetary Policy

Sessions 8-9. Monetary Policy

Problem Set 1 Due: GDP and Price Indices

Sessions 10-11. Interest Rates

Problem Set 2 Due: Budget Deficits

Session 12. Interest Rates

Problem Set 3 Due: Monetary Policy

Sessions 13-16. Equilibrium with money and goods

Problem Set 4 Due: Interest Rates

Problem Set 5 Due: Term Structure

MIDTERM

Sessions 17-18. Money and Inflation

Problem Set 6 Due: Aggregate Demand

Sessions 19-20. Financial Markets DD-RR Model

Problem Set 7 Due: Money and Prices

Sessions 21-22. DD-RR Model/Phillip's Curve

Problem Set 8 Due: Financial Markets

Sessions 23-24. Balance of Payment/Exchange Rates

Problem Set 9 Due: Flexible price DDDR

Problem Set 10 Due: Exchange rates, PPP, and Interest Rate Parity

FINAL EXAMINATION

Syllabus-4 FNCE 613

■ Overview

Macroeconomics and the Global Economic Environment is a course in macroeconomic analysis, with an emphasis on current events and policy applications. The goal of this course is to provide the background needed to recognize and understand the broad economic and financial movements in the global economy. Key topics include national income accounting, production, employment, innovations and economic growth, consumption and saving decisions, investment, the financial markets, the business cycle, monetary and fiscal policy, international trade and investment, international capital flows, exchange rates and international finance. By the end of the course, students will be able to evaluate and discuss the global economic environment in which business and financial decisions are made.

■ Course Material

CANVAS

The Canvas website contains the syllabus, lecture notes, weekly quizzes, teaching assistants' office hours, regrade request forms, and other useful information. You need to have a Wharton account to access the website. If you do not have a Wharton account, you can apply for one online.

READING MATERIAL

The bulk of the course material comes from the lecture notes, the textbook, and course readings. The lecture notes are available on Canvas. The course textbook is *Macroeconomics* (eight edition) from Andrew B. Abel, Ben S. Bernanke and Dean Croushore (referred to as **ABC**), Addison-Wesley, 2014. The study guide that supplements this textbook is a useful aid to students who would benefit from additional explanations and practice with the material. I also recommend *Macroeconomics* (third edition) from Charles I. Jones (referred to as **Jones**), Norton, 2014. Both of these textbooks are on reserve at the library.

Most other course readings come from *The Economist* newspaper and from Federal Reserve Banks publications. They are hyperlinked to web sources from within the syllabus. As such, I suggest you buy a subscription to *The Economist* to access these readings online. If you do not want to buy a subscription to *The Economist*, you can use the Penn library subscription. However, your online access will be limited to Penn computers. Access to Federal Reserve Banks publications is free.

In addition to the regular course material, you are expected to follow current economic events. While no subscription to any particular journal is required, it is recommended that you regularly read *The Wall Street Journal* and *The Financial Times*.

■ Grading

Grades are based on two examinations (80%), ten quizzes (10%), and class participation (10%).

EXAMINATIONS

The midterm and the final examinations are comprehensive and closed book, except for one single handwritten 8.5" x 11" double-sided sheet of notes. Calculators are permitted. The final examination is cumulative over the material from the entire course.

The midterm examination counts as one grade and the final examination counts as two grades. The total examination grade is computed as the average of the best two out of three grades. In other words, the lowest grade among these three grades is dropped. This policy of dropping the lowest examination grade provides you insurance against scheduling conflicts (inability to attend the midterm examination) and anomalous performances (a bad day). Because this insurance is being provided to you, *no requests to reschedule or retake the midterm examination will be entertained* unless specifically mandated by university policy. If you miss the midterm examination for any reason, you can simply use your insurance policy and drop that exam. The final examination can be rescheduled only if required by university policy and only during the official make-up period.

SCHEDULING CONFLICTS

Scheduling conflicts should be resolved according to the *MBA Resource Guide*. If you find yourself with a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. You should never approach your instructor with requests to reschedule exams or to make special accommodations.

REGRADE REQUESTS

Regrade requests must be submitted using the **regrade request form** and the **statement of honesty** posted on Canvas and must be accompanied by your exam. Requests must be submitted within one week from the date the examination is returned (whether or not you actually pick up the exam on that date). Regrade requests must be very specific. For any request, the entire exam will be automatically regraded; meaning, the grade may stay the same, go up or go down after regrading. Any alteration of the exam is therefore strictly forbidden and will be considered as a violation to the Code of Academic Integrity.

QUIZZES

There will be eight (weekly) quizzes available on Canvas. The quizzes are designed to reinforce key concepts from the classes and to help you prepare for the final examination. Your final quiz grade will be the average of your best seven quizzes. In other words, I will drop your lowest quiz grade. The quizzes must be submitted by 9:00 a.m. on the due date. Quizzes will not be accepted late and no regrade requests will be entertained. Answers to quizzes will be posted on Canvas shortly after the due date.

■ Academic Integrity

All relevant University policies regarding Academic Integrity must be followed. Please consult the *Code of Academic Integrity* for details.

Course Outline -4 FNCE 613

TOPIC 1: INTRODUCTION TO MACROECONOMIC DATA

Session 1. National Accounting

Readings: ABC Ch. 2.1-2.3

Jones Ch. 2.1-2.2

“Boundary problems,” *The Economist*, August 2013

Topics: origin of national income accounting, definitions and measurements of Gross Domestic Product (GDP), GDP components, production, income, and expenditure approach of measuring GDP, saving and wealth, GDP and happiness

Session 2. Measuring Economic Changes over Time

Readings: ABC Ch. 2.4 and 2.5

Jones Ch. 2.3-2.4

“A creeping ascent (2013 in charts),” *The Economist*, December 2013

“This time is worse,” *The Economist*, January 2014

Topics: nominal and real GDP, GDP across countries, growth rates, the rule of 70, price indexes and inflation, nominal and real interest rates, the Fisher equation

QUIZ #1 DUE

TOPIC 2: PRODUCTION AND ECONOMIC GROWTH

Session 3. The Production Function

Readings: ABC Ch. 3.1 and 6.1

Jones Ch. 4

“Labour pains,” *The Economist*, November 2013

Topics: production function, return to scale, Cobb-Douglas production function, capital and labor inputs, Total Factor Productivity (TFP or technology), marginal product of capital and labor, diminishing marginal products, capital and labor inputs allocation, production and shocks to labor, capital, or technology, capital and labor income share, sources of economic growth, income differences across countries, growth accounting

Session 4. Drivers of Productivity and Global Competitiveness

Readings: ABC Ch. 6.2-6.4

Jones Ch. 5

“A reasonable supply,” *The Economist*, November 2013

Topics: the Solow growth model, endogenous growth theory, innovation and economic growth, government policies and long-run growth

Session 5: The Solow Growth Model Unleashed

Case study: “The Solow Growth Model Unleashed,” by Nicolas Vincent and Pierre Yared
Columbia Business School ID#130304 on Study.Net

QUIZ #2 DUE

TOPIC 3: ECONOMIC MARKETS

Session 6: The Labor Market, Wages, and Unemployment

Readings: ABC Ch. 3.2-3.6

Jones Ch. 7

The price of getting back to work, *The Economist*, January 2014

What is the new normal unemployment rate? *Economic Letter*, Federal Reserve Bank of San Francisco, February 2011

Topics: the U.S. labor market, labor demand, labor supply, income and substitution effects, labor market equilibrium, full-employment output, wages and inequality, labor market measurements, frictional vs. structural unemployment, natural rate of unemployment, labor markets around the world, Okun’s law

Session 7: Consumption and Saving Decisions

Readings: ABC Ch. 4.1 and appendix 4.A

Jones Ch. 16

Topics: consumption and saving decisions, the intertemporal budget constraint, income and wealth, income and substitution effects, permanent-income hypothesis, Ricardian equivalence, borrowing constraints, empirical evidence on consumption

QUIZ #3 DUE

Session 8: Investment and Goods Market Equilibrium

Readings: ABC Ch. 4.2-4.3

Jones Ch. 17

Topics: firms’ investment decisions, the user cost of capital, desired capital stock and investment, the stock market and financial investment, components of physical investment, saving and investment equilibrium and the real interest rate

Session 9: Money and Inflation

Readings: ABC Ch. 7

Jones Ch. 8

“Closing the gap,” *The Economist*, February 2014

Topics: monetary aggregates, portfolio allocation and the demand for assets, money demand, the quantity theory of money, asset market equilibrium, money growth and inflation, the costs of inflation

QUIZ #4 DUE

TOPIC 4: BUSINESS CYCLE MODELS

Session 10: The Business Cycle and the IS/LM Model

Readings: ABC Ch. 8 and 9.1-9.4

“The New IS-LM Model: Language, Logic, and Limits,” *Economic Quarterly*, Federal Reserve Bank of Richmond, Summer 2000 Read Sections 1 and 2, pp 45-54.

Topics: business cycle trends and fluctuations, actual and potential output, , international aspects of business cycles, overview of the short-run model, equilibrium in the labor, goods, and asset markets, macroeconomic shocks and the IS/LM model

Session 11: Review Session

MIDTERM EXAMINATION

Session 12: Firms Pricing Behavior and the Phillips Curve

Readings: ABC Ch. 11.2 and 12

Jones Ch. 12

Topics: Firms’ pricing behavior over the business cycle, price adjustment and inflation expectations, unemployment and inflation, the Phillips curve, the role of inflationary expectations

Session 13: Aggregate Demand and Aggregate Supply

Readings: ABC Ch. 9.5-9.6

Jones Ch. 13

“The perils of falling inflation,” *The Economist*, November 2013

“In the danger zone,” *The Economist*, January 2014

Topics: aggregate demand curve, aggregate supply curve, the AS/AD framework, the liquidity trap, the dangers of deflation, expectations and economic activity

QUIZ #5 DUE

TOPIC 5: MONETARY POLICY

Session 14: The Federal Reserve System and U.S. Monetary Policy

Readings: ABC Ch. 14.1-14.3

“Tools of Monetary Policy,” Ch. 15 by Frederic Mishkin on Study.Net

“Age shall not weary her,” *The Economist*, December 2013

“Monetary policy, money, and inflation,” *Economic Letter*, Federal Reserve Bank of San Francisco, July 2012

Topics: the Federal Reserve System, central banking around the world, the Federal Open Market Committee, money supply creation, conventional monetary policy, open market operations, the federal fund market

Session 15: Monetary Policy Rules and Unconventional Monetary Policies

Readings: ABC Ch. 14.4-14.5

“Will unconventional policy be the new normal?” *Economic Letter*, Federal Reserve Bank of San Francisco, October 2013

Topics: monetary policy rules, the Taylor rule, the limits of conventional monetary policy, the Great Recession, unconventional monetary policy

QUIZ #6 DUE

Session 16: The Term Structure of Interest Rates and Monetary Policy

Readings: “Term Structure of Interest Rates,” by Frederic Mishkin on Study.Net

Case study: “The yield curve and growth forecasts,” by Francis Warnock
Harvard Business School #UV5689 on Study.Net

Session 17: SPEAKERTBD

TOPIC 6: THE GLOBAL ECONOMY

Session 18: International Trade

Readings: Jones Ch. 19

“The U.S. content of ‘Made in China,’” *Economic Letter*, Federal Reserve Bank of San Francisco, August 2011

Topics: facts about international trade, reasons for trade, risk sharing, absolute and comparative advantage, costs and benefits of international trade

Session 19: Exchange Rates and International Finance 1

Readings: ABC Ch. 5

Topics: balance of payment accounting, goods market equilibrium in an open economy, saving and investment in an open economy, fiscal policy and the current account, trade and capital flows, twin deficits

QUIZ #7 DUE

Session 20: Exchange Rates and International Finance 2

Readings: ABC Ch. 13

Jones Ch. 20

“Unconventional monetary policy and the Dollar?” *Economic Letter*, Federal Reserve Bank of San Francisco, April 2013

Topics: the nominal and real exchange rates, the law of one price, the foreign exchange market, interest rates and exchange rates movements, multinational pricing behavior, the real exchange rate and net exports

TOPIC 7: FISCAL POLICY

Session 21: The Government and the Macroeconomy

Readings: ABC Ch. 15.1-15.3

“Fiscal Headwinds: Is the other shoe about to drop?” *Economic Letter*, Federal Reserve Bank of San Francisco, June 2013

Topics: U.S. government spending and revenue, fiscal policy and aggregate demand, government debt and deficits, sustainability of public debt, problems of the 21st century

QUIZ #8 DUE

Session 22: The World Today and Global Growth Prospects

Readings: “World Economic Outlook,” Chapter 1-2, April 2015, *International Monetary Fund*

Session 23: Review Session

FINAL EXAMINATION

Syllabus FNCE 615

■ Overview

This is a survey course in macroeconomics with an emphasis on current events and policy applications. The objective of the course is to provide students with the background needed to understand current global macroeconomic events. Key topics include economic growth, technological change, booms and recessions, inflation, interest rates, monetary and fiscal policy, international trade and exchange rates. By the end of the course, students should be able to read and understand the discussion of macroeconomic issues in newspapers such as *The Economist*, *The New York Times*, *The Wall Street Journal* and *The Financial Times*.

■ Course Material

CANVAS

There is a Canvas site containing the syllabus, lecture notes, quizzes, and other useful information. You need to have a Wharton account to enter the site. If you do not have a Wharton account, you can apply for one online.

READING MATERIAL

The course material consists of lecture slides, the textbook, and course readings. The lecture slides will be posted on Canvas prior to class. The main textbook is *Macroeconomics* (8th edition) by Andrew B. Abel, Ben S. Bernanke and Dean Croushore (henceforth **ABC**), Addison-Wesley, 2013. I will also assign select chapters from two other books: *Macroeconomics* (3rd edition) by Charles Jones (henceforth **Jones**), W.W. Norton, 2014; and *The Economics of Money, Banking, and Financial Markets* (10th edition) by Frederic Mishkin (henceforth **Mishkin**), Prentice Hall, 2013. These chapters are available for download through the Study.Net tab on Canvas. Finally, there will be a few course readings from *The Economist* and other publications that are hyperlinked in the course outline section of Canvas; and we will work through two case studies, also available for download through the Study.Net tab on Canvas.

■ Course Etiquette

While attendance is not mandatory, your learning experience will be most successful if you come to class regularly and complete the assigned readings in advance. Macroeconomics is a complex subject about key current issues. You will be able to understand and form your opinion about these issues only if you actively engage with the material. Moreover, the lecture slides posted on Canvas are not comprehensive. They only provide context for the topics discussed in class.

If you come to class, consider it like a contract. Your end of the contract is to come prepared and to engage fully in the classroom conversation. My end of the contract is that I will do everything in my power to make it worth your time to be there. To that end, I may sometimes call on students, asking questions about the assigned readings. This is not meant to embarrass but instead intended to create an incentive for everyone to complete the reading assignments ahead of time and participate, thereby contributing to a stimulating class discussion.

To further promote a good learning environment free of distractions, I ask you to refrain from using laptops, phones and other electronic devices during class. With your laptop open, it is almost impossible not to check email or briefly surf the internet, even if you don't mean to or have told yourself that you won't. Recent research has shown that this kind of multitasking impairs your learning and distracts your peers. Moreover, even if you are just taking class notes with your laptop, it takes away from the sense of conversation I would like to foster during class. Of course, you may disagree with me and strongly prefer to take notes with your laptop. If that is the case, please come talk to me and we will find a way to make it work.

■ Grading

Grades are based on a final exam (65%), five quizzes (25%), and class participation (10%).

FINAL EXAM

The final exam will cover the entire course material and is closed book, except for one single 8.5" x 11" double-sided sheet of notes. Calculators (that cannot communicate with each other) are permitted. The exam cannot be rescheduled except if required by university policy. For more information on how to resolve scheduling conflicts, consult the MBA Resource Guide or contact the MBA program office.

If you feel your final exam is graded incorrectly, you can fill out the regrade request form as well as the statement of honesty posted on Canvas and submit them together with your exam within one week from the date the exam is returned (whether or not you actually pick up the exam on that date). Regrade requests must be very specific, providing a clear description of the problem and why you think the exam should be graded differently. For any request, the entire exam will automatically be regraded; meaning, the grade may stay the same, go up, or go down after regrading. Any alteration of the exam is therefore strictly forbidden and will be considered as a violation to the Code of Academic Integrity.

QUIZZES

There will be 4 quizzes, administered through Canvas. The quizzes are designed to reinforce key concepts from class and to help you prepare for the final. Due dates will be indicated under the course outline section of the syllabus. Quizzes are due by 9:00 a.m. of the indicated due date and will not be accepted late. No regrade requests will be entertained for quizzes.

CLASS PARTICIPATION

The class participation grade will be determined by how actively you ask questions and contribute to class discussions. It is intended to reward students for their efforts in contributing to a stimulating class environment. Past experience has shown that a good class participation grade is a quasi-guarantee for obtaining an "above-LT" grade even if you do not perform well on the quizzes and the final exam.

■ Academic Integrity

All relevant University policies regarding Academic Integrity must be followed. Please consult the *Code of Academic Integrity* for details.

Course Outline FNCE 615

MACROECONOMIC DATA

Session 1. National Income Accounting and Gross Domestic Product

Readings: ABC Chapters 1, 2.1 – 2.3

“The real wealth of nations” *The Economist*, June 30, 2012

Topics: Definition and measurement of Gross Domestic Product (GDP); GDP components; savings and wealth; alternative measures of economic performance and wealth.

Session 2. Prices, Inflation and Economic Measurement over Time

Readings: ABC Chapters 2.4 – 2.5

Jones Chapters 3.1 – 3.5

“The \$210 Million Baseball Contract That Explains How Inflation Works” *The New York Times*, January 21, 2015.

Topics: Real and nominal GDP; price indices and inflation; nominal and real interest rates; the Fisher equation; growth rates; the Rule of 70.

QUIZ #1 DUE

THE LONG RUN

Session 3. A Model of Production

Readings: ABC Chapters 3.1 and 6.1

Topics: Production function; constant returns to scale; diminishing marginal returns to capital and labor; Total Factor Productivity (TFP); growth accounting.

Session 4. The Sources of Economic Growth

Readings: ABC Chapters 6.3 – 6.4

Jones Chapters 6.1 – 6.2

“Has the ideas machine broken down?” *The Economist*, January 12, 2013.

Topics: Solow growth model; conditional convergence; technological progress; human capital; research and development; the Economics of Ideas.

Case study: “The Solow Model Unleashed: Understanding Economic Growth,” by Nicolas Vincent and Pierre Jared, Columbia Business School Case #130304 (available at Study.Net)

CASE STUDY DUE

THE LABOR MARKET

Session 5. Labor Demand, Labor Supply and Unemployment

Readings: ABC Chapters 3.2 – 3.5, 12.3

“The Missing Millions” *The Economist*, September 28, 2013

Topics: The U.S. labor market and labor markets around the world; labor demand; labor supply; labor market equilibrium; frictional vs. structural unemployment; the natural rate of unemployment.

QUIZ #2 DUE

THE SHORT RUN

Session 6. Business Cycles: Facts and Explanations

Readings: ABC Chapters 3.6, 8.1 – 8.4

Jones Chapters 12.2 and 13.2

Topics: Trends and business cycle fluctuations; actual and potential output; Okun's law; the IS curve, the MP curve and the aggregate demand/aggregate supply (AS/AD) framework.

Session 7. The Great Recession and Cyclical Macroeconomic Policy

Readings: ABC Chapters 10.1 – 10.3, 11.2 – 11.4, 12.1 – 12.2

“The Morning After” *The Economist*, June 24, 2010

Topics: The Great Recession viewed through the AS/AD framework; the American Recovery and Reinvestment Act; Classical and Keynesian explanations of business cycles and their implications for macroeconomic policy; price rigidities and the Phillips curve.

QUIZ #3 DUE

MONETARY POLICY

Session 8. The Federal Reserve System and Conventional Monetary Policy

Readings: ABC Chapters 14.1 – 14.2, 14.4 (up to page 560), 14.5

Mishkin Chapter 15 (page 355 – 371)

Topics: The Federal Reserve System; fractional reserve banking; money multiplier; the Federal Funds market; open market operations; rules versus discretion.

Session 9. The Financial Crisis of 2008 and Unconventional Monetary Policy

Readings: ABC Chapter 14.4 (from page 560 on)

Mishkin Chapter 6

“The Federal Reserve’s unconventional policies,” *Economic Letter*, Federal Reserve Bank of San Francisco, November 13, 2012

“Monetary Policy, Money, and Inflation” *Economic Letter*, Federal Reserve Bank of San Francisco, July 9, 2012

Topics: The Zero-Lower Bound; forward guidance; large-scale asset purchases; Fed balance sheet expansion.

QUIZ #4 DUE

FISCAL POLICY

Session 10. Government Spending and Its Financing

Readings: ABC Chapters 15.1 – 15.3

“Budget Puzzle: You Fix the Budget” *The New York Times*, November 13, 2010

Topics: U.S. government spending and revenue; fiscal policy and aggregate demand; automatic stabilizers; incentive effects of fiscal policy; government debt and deficits; sustainability of public debt.

THE GLOBAL ECONOMY

Session 11. International Trade and Exchange Rates

Readings: ABC Chapters 13.1 – 13.2

“Oily and easy” *The Economist*, January 24, 2015

Topics: Nominal and real exchange rates; the real exchange rate and net exports; the foreign exchange market; short-run and long-run determinants of exchange rates; the open-economy AS/AD framework.

Case study: “Draghi’s commitment?” by Francis Warnock

Darden Business School Case UVA-GEM-0113 (available at Study.Net)

CASE STUDY DUE

Session 12. The European Debt Crisis and the Future of the Euro

Readings: ABC Chapters 13.4 – 13.5 (skim)

Topics: Fixed and flexible exchange rate regimes; currency unions; speculative attacks; the policy trilemma.

FINAL EXAMINATION

Economics of Managerial Decision Making (MGEC 611/612)

■ Course Description

MGEC 611: Microeconomics for Managers Foundations establishes the micro-economic foundations for understanding business decision-making and includes consumer theory and market demand with full information, production theory and economic cost.

MGEC 612: Microeconomics for Managers: Advanced Applications covers the economic foundations of business strategy and decision-making in market environments with less than full information and includes game theory and strategies.

■ Waiver by Exam

Incoming students may waive the first or both Quarter courses of Microeconomics for Managers: Quarter I (MGEC 611): Microeconomics for Managers: Foundations and Quarter II (MGEC 612): Microeconomics for Managers; Advanced Applications. To waive these required courses acceptable performance on a waiver examination will be required.

To be exempted from enrolling in MGEC 611: Microeconomics for Managers: Foundations, students have to pass a 90-minute waiver exam. Similarly, to be exempted from enrolling in MGEC 612: Microeconomics for Managers: Advanced Applications, students have to pass a 60-minute exam, in addition to taking the MGEC 611 exam. All students who pass the MGEC 612 waiver exam will automatically be exempted from enrolling in MGEC 611, provided their performance on the MGEC 611 exam is adequate, even if not outright passing. Topics covered by the two exams are listed below and sample examinations are provided in the *Waiver Exam Guide*.

The MGEC 611 waiver exam tests mastery of the following topics:

1. Demand, Consumer Surplus, and Elasticities
2. Production and Cost Minimization
3. Costs and Opportunity Costs
4. Competitive Market Equilibrium
5. Taxation and Regulation
6. Monopoly Power
7. Price Discrimination
8. Bundling
9. Two-Part Tariffs
10. Double Marginalization

The MGEC 612 exam tests mastery of the following topics:

1. Pricing strategies in Oligopolies, including collusion
2. Game theory, including solving Prisoner Dilemma Games, Commitment Strategies, Credible Threats
3. Auctions
4. Decision Making under Uncertainty
5. Risk Sharing and Strategies for Managing Risk
6. Moral Hazard and Incentive Contracting
7. Asymmetric Information and Signaling

Texts which can help prepare students for these exams include:

- Robert Pindyck and Daniel Rubinfeld, *Microeconomics*.
- David Besanko and Ronald Braeutigam, *Microeconomics*.
- Michael Baye, *Managerial Economics and Business Strategy*.
- David Kreps, *Microeconomics for Managers*.

Syllabus MGEC 611

■ Readings

The primary textbook is *Microeconomics*, Doug Bernheim and Michael Whinston, 2nd Edition, McGraw-Hill [BW in course outline]. It is not mandatory, but will be extremely useful for students with no or little background in economics, or those who have not seen similar material in many years. For some topics, we will suggest additional readings from other texts, such as *Intermediate Microeconomics: A Modern Approach*, Hal Varian, 8th Edition, Norton. The text is available at the bookstore.

Before each class, we expect all students to have read the assigned newspaper articles for that class to facilitate a classroom discussion on the lecture's lesson. PDF versions of the assigned articles are available under "Files\Readings" on Canvas.

■ Teaching Assistants

TAs will hold recitations, at which they will solve practice exam problems, and office hours, which are a more free-form time for questions. Attendance of either recitations or office hours is not mandatory. Feel free to attend whichever office hours or recitation fit your schedule. **Please contact the head TA concerning administrative details and use Canvas' discussion board for questions related to the material.**

The teaching assistants will hold two reviews for the Final Exam.

■ Mathematical Requirements

You should review elementary algebra and calculus and:

1. Be able to graph an equation, especially a linear equation.
2. Be able to solve a system of two linear equations and two unknowns.
3. Understand what a derivative is.
4. Be able to compute the derivative of a simple equation.
5. Know how to find the maximum or minimum of a function using derivatives.

There is a practice "problem set" (no need to submit your answers; it is just for your own self-assessment) posted on Canvas. If you understand how to do the problem set, you should be fine in terms of the math for this course. If you have any difficulty, please talk to a TA about steps you can take to get your math skills up to speed.

■ Grading Policies

1. Each student must submit his or her own problem set. Collaboration is permitted **ONLY WITHIN LEARNING TEAMS** while working through the questions.

2. Problem sets should be submitted to the section-labeled hanging folders just inside **1041 Steinberg Hall-Dietrich Hall** (i.e. the smaller door to the left of the main entrance to the 1400 suite). The door will be closed at 4 p.m. on the day of the deadline. Please be mindful that this is a working office. **Submissions will not be accepted once the door is closed, and submissions will not be accepted through any other method, including email.**
3. The exam is closed book, but a one page “crib sheet” of formulas is allowed along with a stand-alone (not a phone or a computer) calculator (details to be discussed in class).
4. Each problem set is graded on a twenty point scale across all problems in the problem set. Full points will be given for correct answers showing the derivations; Points will be subtracted for mathematical and logical errors. Zero points will be given for no answers; correct answers without supporting derivation; or simply stating economic concepts without applying them to the specific question.
5. If you wish to dispute a grade on an assignment or an exam, you must do so by the dispute deadline we will announce in class. In order to file a dispute, you must ante up 5% of the value of the assignment. If we conclude that your dispute is valid, you will receive the 5% back, but if not, we will keep it. We also reserve the right to re-grade all parts of a disputed assignment, not only the specific parts you wish to dispute. Finally, your dispute must be put into writing, attached to the original graded exam, and submitted to the same place that the homework assignments are submitted, by 4 p.m. on the dispute deadline. **Again, disputes will not be accepted beyond the deadline, and disputes will not be accepted through any other method.**
6. **Any evidence of cheating is sent immediately to the Dean.**
7. Your score for the course will be calculated according to the following table. Course grades will be “curved” at the instructor level across his/her sections, i.e. not across *all* sections.

Assessment	% of Grade
Problem Set 1	20%
Problem Set 2	20%
MGEC 611 Exam	50%
Attendance and Participation	10%

■ Classroom Policies

1. Each student must sit in his or her assigned seat with name-card displayed.
2. You are expected to have read the assigned articles before class. We suggest that you briefly discuss them with your learning teams as well.
3. We will cold-call people.
4. If you would like to take notes electronically, tablets, but not laptops or smartphones, can be used in the classroom.

5. Wharton “concert rules” apply: be seated when class is scheduled to start and don’t leave the room unless absolutely necessary. Individual faculty will set policies regarding late arrivals to class.

■ Attendance Policies

We will rely on the attendance app developed by the MBA Program Office (MBAPO) in conjunction with the seating chart to record attendance. Arriving ten or more minutes late for class is treated as an absence and absences will be excused only for the specific reasons listed on the MBAPO website. Please review the MBAPO’s core course attendance policy here:

<https://spike.wharton.upenn.edu/mbaprogram/Policies/MBA%20Program%20Attendance%20Policy.cfm>

Course Outline MGEC 611

KEY

BW *Microeconomics*, Doug Bernheim and Michael Whinston, 2nd Edition, McGraw-Hill.

Session 1: Course Introduction and Market Demand

1. Overview of the Course
2. Reservation Prices and Demand
3. Aggregating Demand Curves
4. Measuring Satisfaction: Consumer Surplus

Reading: BW Chapters 2.1, 6.1, 14.2 section on “Market Demand”, 14.5

Article: “Frustrations of Air Travel Push Passengers to Amtrak”, Ron Nixon, *The New York Times*, 8/15/2012

Session 2: Production and Supply Curves

1. Types of costs firms face
2. Production functions
3. Solving for the optimal ratio of inputs
4. Solving for a variable cost function

Reading: BW Chapters 2.2, 7.2, 7.3 (through p. 223), 8.1-8.6

Article: “Here Come the Robot Lawyers”, James O’Toole, *CNN Money*, 3/28/2014

Article: “Game over for 520 Zynga workers”, Brett Molina and Jon Swartz, *USA Today*, 6/4/2013

Session 3: Equilibrium and Elasticity

1. Market Equilibrium
2. Understanding Consumer Demand: Price elasticity, income elasticity, and cross-price elasticity

Reading: BW Chapters 2.3, 2.4

Article: “Food Prices Surge as Drought Exacts a High Toll on Crops”, Tony C Dreibus, Leslie Josephs, Julie Jargon, *The Wall Street Journal*, 3/18/2014.

Article: “NY reaches price limit deal with car service Uber”, *The Wall Street Journal*, 7/8/2014

Session 4: Government Interventions

1. How interventions affect a market equilibrium
2. Incidence of interventions
3. Externalities, and why governments intervene.

Reading: BW Chapter 15.1, 15.2, 20.1, 20.3

Article: “PA House passes cigarette tax for Philly schools”, Kevin McCorry, *WHYY*, 7/2/2014.

Article: “A Price Tag on Carbon as a Climate Rescue Plan”, Justin Gillis, *The New York Times*, 5/30/2014

Session 5: Perfectly Competitive Industries

1. What do we mean by a “perfectly competitive” market?
2. Profit maximization by perfectly competitive firms
3. Market outcomes in perfectly competitive markets
4. Short Run vs. Long Run decision-making

Reading: BW Chapter 9 (in particular 9.3), 14.3, 14.4

Article: “Freighter Oversupply Weighs on Shipowners and Banks” Keith Bradsher, *The New York Times*, 1/25/2012

Article: “Asian Group Tries to Stem Rubber’s Swoon”, Huileng Tan, *The Wall Street Journal*, 2/10/2014

PROBLEM SET 1 DUE**Session 6: Firms with Market Power: Monopoly**

1. What is market power?
2. Marginal Revenue and Uniform Pricing with market power.
3. Sources of Market Power: patents, licenses, etc.
4. The Inverse-Elasticity Pricing Rule

Reading: BW Chapter 17.1-17.3

Article: “Rapid Price Increases for Some Generic Drugs Catch Users by Surprise”, Elisabeth Rosenthal, *The New York Times*, 7/8/2014.

Article: “Rare Earth Minerals: An End To China’s Monopoly Is In Sight”, Paul Martyn, *Forbes*, 6/8/2012.

Session 7: Pricing with Market Power–Single Unit Price Discrimination

1. Different types of Price Discrimination: how well are you able to target consumers with different tastes
2. Perfect price discrimination: applications and outcomes
3. Pricing on demographics
4. Self-selecting prices.

Reading: BW Chapter 18.1-18.4 (readings overlap with Lecture 8)

Article: “Supermarkets Offer Personalized Pricing”, Olga Kharif, *Bloomberg Businessweek*, 11/14/2013.

Article: “Websites Vary Prices, Deals Based on Users’ Information”, Jennifer Valentino-Devried, Jeremy Singer-Vine and Ashkan Soltani, *The Wall Street Journal*, 12/24/2012

Session 8: Pricing with Market Power – Multi-Unit Price Discrimination

1. Designing products for consumers to self-select
2. Quantity discounting
3. Versioning, “Damaged Goods”

Reading: BW Chapter 18.1-18.4 (readings overlap with Lecture 7)

Article: “All-You-Can-Fly Airline Plies the California Coast,” Billy Witz, *The New York Times*, 8/5/2013

Article: “Nibbled to Death,” Pete Wells, *The New York Times*, 10/9/2012,

Session 9: Pricing with Market Power–Two-Part Tariffs

1. Introduction to two-part pricing
2. Optimal two-part tariffs with full information
3. Two-part pricing to markets with multiples types of consumers

Reading: BW Chapter 18.2 (from p. 631), 18.4 (p. 644-648)

Article: “Microsoft Squeezes Little Profit out of Each XBOX One”, Lance Whitney, *CNET* 11/26/2013

Article: “A Stingy Spirit Lifts Airline's Profit”, Jack Nicas, *The Wall Street Journal* 5/12/2012

PROBLEM SET 2 DUE

Session 10: Pricing with Market Power–Bundling

1. Capturing surplus from bundling goods together
2. When “Pure” and “Mixed” bundling strategies are profitable.
3. Tying goods together.

Reading: BW Chapter 18.5

Article: “The CBS Standoff and the Enduring Beauty of Bundled TV”, Justin Bachman, *Bloomberg Businessweek*, 8/6/2013

Article: “New Netflix Pricing Gets Thumbs Down–Stock Falls 19% As Customers Leave” Ian Sherr, *The Wall Street Journal*, 9/16/2011

Session 11: Pricing in vertical markets

1. How market structure at different levels affects the final goods market
2. Double markups and how to avoid them
3. Implications of forms of downstream/retail competition
4. Optimal contracts to overcome vertical market distortions

Reading: PR Appendix to Chapter 11, available on study.net.

Article: “Fallout From Apple’s Loss on E-Books”, Brian X. Chen and Julie Bosman, *The New York Times*, 7/10/2013

Article: “Sticker shock: Why are glasses so expensive?”, Lesley Stahl, *CBS News*, 10/7/2012

Session 12: Course Review and Other Topics

PROBLEM SET 3 DUE

MGEC 611 EXAM

Syllabus MGEC 612

■ Readings

The primary textbook is *Microeconomics*, Doug Bernheim and Michael Whinston, 2nd Edition, McGraw-Hill [BW in course outline]. It is not mandatory, but will be extremely useful for students with no or little background in economics, or those who have not seen similar material in many years. For some topics, we will suggest additional readings from other texts, such as *Intermediate Microeconomics: A Modern Approach*, Hal Varian, 8th Edition, Norton [Varian in course outline]. The text is available at the bookstore.

Before each class, we expect all students to have read the assigned newspaper articles for that class to facilitate a classroom discussion on the lecture's lesson. PDF versions of the assigned articles are available under "Files\Readings" on Canvas.

■ Teaching Assistants

TAs will hold recitations, at which they will solve practice exam problems, and office hours, which are a more free-form time for questions. Attendance of either recitations or office hours is not mandatory. Feel free to attend whichever office hours or recitation fit your schedule. **Please contact the head TA concerning administrative details and use Canvas' discussion board for questions related to the material.**

The teaching assistants will hold two reviews for the Final Exam.

■ Mathematical Requirements

You should review elementary algebra and calculus and:

1. Be able to graph an equation, especially a linear equation.
2. Be able to solve a system of two linear equations and two unknowns.
3. Understand what a derivative is.
4. Be able to compute the derivative of a simple equation.
5. Know how to find the maximum or minimum of a function using derivatives.

■ Grading Policies

1. Each student must submit his or her own problem set. Collaboration is permitted **ONLY WITHIN LEARNING TEAMS** while working through the questions.
2. Problem sets should be submitted to the section-labeled hanging folders just inside **1041 Steinberg Hall-Dietrich Hall** (i.e. the smaller door to the left of the main entrance to the 1400 suite). The door will be closed at 4 p.m. on the day of the deadline. Please be mindful that this is a working office. **Submissions will not be accepted once the door is closed, and submissions will not be accepted through any other method, including email.**

3. The exam is closed book, but a one page “crib sheet” of formulas is allowed along with a stand-alone (not a phone or a computer) calculator (details to be discussed in class).
4. Each problem set is graded on a twenty point scale across all problems in the problem set. Full points will be given for correct answers showing the derivations; Points will be subtracted for mathematical and logical errors. Zero points will be given for no answers; correct answers without supporting derivation; or simply stating economic concepts without applying them to the specific question.
5. One of the learning components of this course is a **group project** that you will complete with the members of your learning team. Its objective is to apply the concepts studied in the course to a current event, such as a product pricing analysis, a merger case, or a policy debate. We would like you to choose a topic based on a recent newspaper story and conduct an analysis using some of the tools from class. The deliverables for the project consist of a report of at most two pages in length and up to three PowerPoint exhibit slides, together with a copy of the original article. We will choose a random subset of topics for presentation in class 11. Each invited group will get 10 minutes to present an overview of their topic and their analysis followed by 5 minutes of Q&A.

Each project will be graded out of ten points based on the summary write-up and the PowerPoint presentation. Grades will reflect the relevance of economic concepts used. Each team will receive a single group grade.

6. If you wish to dispute a grade on an assignment or an exam, you must do so by the dispute deadline we will announce in class. In order to file a dispute, you must ante up 5% of the value of the assignment. If we conclude that your dispute is valid, you will receive the 5% back, but if not, we will keep it. We also reserve the right to re-grade all parts of a disputed assignment, not only the specific parts you wish to dispute. Finally, your dispute must be put into writing, attached to the original graded exam, and submitted to the same place that the homework assignments are submitted, by 4 p.m. on the dispute deadline. **Again, disputes will not be accepted beyond the deadline, and disputes will not be accepted through any other method.**
7. **Any evidence of cheating is sent immediately to the Dean.**
8. Course grades will be “curved” at the instructor level across his/her sections, i.e. not across *all* sections. Your score for the course will be calculated according to the following table:

Assessment	% of Grade
Problem Set 1	15%
Problem Set 2	15%
Group Project	10%
MGEC 612 Exam	50%
Attendance and Participation	10%

■ Classroom Policies

1. Each student must sit in his or her assigned seat with name-card displayed.
2. You are expected to have read the assigned articles before class. We suggest that you briefly discuss them with your learning teams as well.
3. We will cold-call people.
4. If you would like to take notes electronically, tablets, but not laptops or smartphones, can be used in the classroom.
5. Wharton “concert rules” apply: be seated when class is scheduled to start and don’t leave the room unless absolutely necessary. Individual faculty will set policies regarding late arrivals to class.
6. Professors reserve the right to record classroom sessions. Videos will not be made public, but may be made available to students that missed a session for an approved reason.

■ Attendance Policies

We will rely on the attendance app developed by the MBA Program Office (MBAPO) in conjunction with the seating chart to record attendance. Arriving ten or more minutes late for class is treated as an absence and absences will be excused only for the specific reasons listed on the MBAPO website. Please review the MBAPO’s core course attendance policy here:
<https://spike.wharton.upenn.edu/mbaprogram/Policies/MBA%20Program%20Attendance%20Policy.cfm>

Course Outline MGEC 612

KEY

BW *Microeconomics*, Doug Bernheim and Michael Whinston, 2nd Edition, McGraw-Hill.

Varian *Intermediate Microeconomics: A Modern Approach*, Hal Varian, 8th Edition, Norton

Session 1: Strategic Interactions I: Intro to Game Theory

1. Overview of MGEC 612
2. Game theory as a framework for thinking about strategy
3. The elements of a game and different types of games.
4. Simultaneous move games: drawing a game board, dominant strategies, dominated strategies, and Nash Equilibrium

Reading: BW Chapter 12.1-12.2, 12.3 (through p. 406), 12.4 (through p. 417)

Video: “Golden Balls”: www.youtube.com/watch?v=S0qjK3TWZE8

Video: “Golden Balls” 2: www.youtube.com/watch?v=S0qjK3TWZE8

Session 2: Strategic Interactions II: Advanced Game Theory

1. Sequential games, the game tree, and backwards induction.
2. Finitely-Repeated simultaneous move games.
3. Credible and non-credible threats.
4. Changing the game structure to change the outcome.

Reading: BW Chapter 12.4 (from p. 418), 12.5

Article: “Best Buy Holiday Pricing Will Match Rivals Even After Items Are Sold”, Mae Anderson, *Associated Press*, Nov. 21, 2013.

Article: “Companies Cash In on Tax-Credit Arms Race”, Emily Chasan, *The Wall Street Journal*, June 16, 2014.

Session 3: Strategic Interactions III: Basic Oligopoly

1. Bertrand Competition: Choosing Price
2. Cournot Competition: Choosing Quantity
3. Horizontal Mergers and Collusion

Reading: BW Chapter 19.1-19.4

Article: “Dominant in the U.S., Enterprise Holdings looks offshore”, A. Ananthalakshmi, *Reuters*, Oct 12, 2012.

Article: “Holcim, Lafarge in Merger Talks to Create Cement Giant”, Inti Landauro and John Revill, *The Wall Street Journal*, April 4, 2014.

Session 4: Strategic Interactions IV: Advanced Oligopoly

1. Bertrand-Nash Competition: Competitive Pricing with Market Power
2. First-mover advantage
3. Limit pricing to prevent entry

Reading: BW Chapter 19.6-19.7

Article: “AIRSHOW-How plane giants descended into global ‘price war’”, Tim Hepher, *Reuters*, July 7, 2012.

Article: “U.S., Filing Suit, Moves to Block Airline Merger”, Jad Mouawad, *The New York Times*, August 13, 2013

Session 5: Strategic Interactions V: Sustaining Cooperation

1. Review of time-value and discounting principles
2. Building a reputation through repeated interactions.
3. Price Wars
4. Sustaining cooperation without collusion.

Reading: BW Chapter 19.5

Article: “\$1 Pizza Slice is Back After a Sidewalk Showdown Ends Two Parlors’ Price War”, Matt Flegenheimer, *The New York Times*, September 5, 2012.

Article: “Silicon Valley Tech Giants Struck Deals on Hiring, Say Documents”, Jeff Elder, *The Wall Street Journal*, April 20, 2014.

Session 6: Strategic Interactions VI: Sustaining Cooperation and Mixed Strategies

1. Wars of Attrition
2. Playing with an element of randomness: mixed strategies.
3. Equilibria in mixed strategies.
4. Firm applications of mixed strategies: when coordination wins.

Reading: BW

Article: Play 20 rounds of Rock-Paper-Scissor versus a machine (on Veteran mode) at this webpage: www.nytimes.com/interactive/science/rock-paper-scissors.html?_r=0

Article: “Some Caterpillar Workers Cross Picket Line”, James R. Hagerty, *The Wall Street Journal*, July 24, 2012

PROBLEM SET 1 DUE**Session 7: Bidding and Selling in Auctions**

1. Common issues in auction design and format
2. Bidding functions in different auctions
3. The winner’s curse
4. Considerations when running or bidding in auctions

Reading: Varian Chapter 17

Article: “Buyer of \$142.4 Million Bacon Triptych Identified as Elaine Wynn”, Carol Vogel, *The New York Times*, January 15, 2014.

Article: “Google confirms it bid up spectrum for ‘open’ rules”, John Letzing, *The Wall Street Journal MarketWatch*, April 3, 2008.

Session 8: Dealing with uncertainty

1. Risk preferences and risk aversion
2. Buying insurance: Paying to mitigate risk
3. Behavioral evidence of risk aversion

Reading: BW Chapter 21.1-21.3

Article: “Deliver us from competition”, *The Economist*, June 25th 2009.

Article: “The Dark Magic of Structured Finance”, Alex Tabarrok, *Marginal Revolution*, May 13, 2010.

Session 9: Asymmetric Information and Signaling

1. Strategic interaction where one party knows more than the other
2. Market outcomes under asymmetric information
3. Signaling and screening to overcome adverse selection

Reading: BW Chapter 21.1-21.3

Article: “HP's \$8.8 Billion Fiasco Exposes Flaws In M&A Process,” Michael Bobelian, *Forbes*, Nov. 21, 2012.

Article: “The Economics of All-You-Can-Eat Buffets,” Adam Ozimek, *Forbes*, May 23, 2012.

Session 10: Moral Hazard: Giving people incentive to do what you want them to do

1. The issues of unobserved effort and unobserved preferences
2. Sales force motivation
3. Efficiency wages
4. Executive compensation

Reading: BW Chapter 21.4

Article: “Paying Employees to Stay, Not to Go”, Steven Greenhouse and Stephanie Strom, *The New York Times*, July 4, 2014.

Article: “Mary Barra's GM Pay Could Top \$14 Million, Putting Her in the Big Three”, Joshua Brustein, *BusinessWeek*, Feb 10, 2014.

GROUP ASSIGNMENT DUE

Session 11: Group Presentations

Session 12: Course Wrap-Up

PROBLEM SET 2 DUE

MGEC 612 EXAM

Marketing Management: Program Design (MKTG 611)

■ Course Description

This course addresses the management challenge of designing and implementing the best combination of marketing actions to carry out a firm's strategy in its target markets. Specifically, the course seeks to develop your skills in applying the analytic perspectives, decision tools, and concepts of marketing to business decisions.

■ The Marketing Management: Program Design Waiver Process

WAIVER BY CREDENTIAL

DEADLINE: See Introduction to this Waiver Guide

To waive or substitute by credential, a student must have completed an Introduction to Marketing or Marketing Strategy course at a four-year college within the last 5 years. To waive MKTG 611 altogether, the course must have included decision-oriented case analyses with analytical rigor and the student must have earned a grade of A. To substitute MKTG 611 by an upper-level elective marketing course of 0.5 credit units or more to be taken for a grade, the course need not have included case analysis and the student must have earned a grade of A- or better.

Documenting Your Credentials

- Transcripts with course and grade highlighted
- Title and author of textbook used in the class
- Titles of cases analyzed
- Copy of syllabus (credentials cannot be reviewed without the syllabus)

WAIVING BY EXAM

There is no waiver exam for this class.

Syllabus MKTG 611

■ Overview

The first-quarter marketing course (MKTG 611) has two main objectives:

- First, to help you develop an understanding of how organizations can benefit from creating and delivering superior value to their customers and stakeholders.
- Second, to learn skills in applying analytic perspectives, decision tools and frameworks so you can build a disciplined approach to the analysis of business situations and develop successful marketing plans.

We shall achieve this by learning how to make sound decisions pertaining to:

1. **Segmentation, targeting, and positioning.** How to: assess market potential, understand and analyze customer behavior, and focus resources on specific customer segments and against specific competitors.
2. **Branding.** How to: develop, measure, and capitalize on brand equity.
3. **Pricing.** How to: set prices that demonstrate value to the customer and capture value for the firm.
4. **Distribution channels.** How to: understand the role of distributors, retailers, and other intermediaries in delivering products, services and information to customers.
5. **Marketing communications.** How to: develop an effective mix of marketing communication efforts.

In addition, the course also helps you develop the following important skills:

- Make and defend marketing decisions in the context of stylized real-world problem situations with incomplete information (case studies).
- Improve your skills in *group problem-solving* and in written and oral *communication* (case write-ups and presentations).
- Make *cross-functional connections* between marketing and other areas of business.

We believe that these skills will serve you in any business situation, any geography, and any industry.

■ Course Materials

The MKTG 611 cases and copyrighted reading materials are available through Study.Net.

Canvas will be used as the source for additional readings, class handouts and other materials.

■ Learning Support

Teaching Assistants (TAs) are available to review lecture and case topics. Their names, contact information, and cohort assignment are on the last page of this syllabus and will be posted on Canvas.

Canvas will be used extensively as a forum for communication, including:

- Distributing case discussion questions.
- Sharing additional materials related to lectures and case discussions.

You are encouraged to post articles in the Canvas Discussion section that apply what we've covered in class or provide updates on examples discussed.

■ Grading

The components for the final course grade and their relative weightings are:

Class participation and attendance	15%
Case write-up (lower score)	15%
Case write-up (higher score)	25%
Final examination	45%
Total	100%

CLASS PARTICIPATION AND ATTENDANCE (15%)

Constructive participation in lectures and case discussions is based on analysis rather than mere opinion, and builds on the discussion flow at the time (a good participant is a good listener). Class participation will account for 10 out of the 15 points.

Attendance is required for every class session. Students will use the class check-in feature in the Wharton Connect mobile app to indicate their attendance in class. Students who come more than 5 minutes late will not receive attendance credit for that class session. Class attendance will account for 5 out of the 15 points. If you are unable to attend, email your TA ahead of time explaining why. Absences must be excused by the MBA Office. Two or more unexcused absences will result in a grade of zero for class participation and attendance.

CASE WRITE-UPS (40%)

See the instructions and due date information at the end of this document.

FINAL EXAMINATION (45%)

The exam will be a timed 4-hour open-note, take-home case analysis. The exam will be made available to students via Canvas at 3 p.m. Students will have 4 hours to complete the exam and will then upload their exam, in Microsoft Word or PDF Format, to Canvas by 7 p.m. Excel spreadsheets may be used for calculation purposes but cannot be submitted. Any tables must be presented in Word or PDF and included as exhibits in the completed exam document. Students must work individually and may refer to course materials when completing the exam but should not use or access any outside materials during the exam period. Additional details regarding downloading the exam and uploading answers will be provided. TAs and faculty will be available via email during the exam period to answer student questions.

All submitted exams will be processed via Turnitin. The University of Pennsylvania is using Turnitin originality reporting services designed by iParadigms, LLC. Your exam submission will be processed through Turnitin only to compare against other papers submitted for this assignment, along with Turnitin's database and other Internet sources. Your exams will not be retained by iParadigms. The Turnitin service does not assess whether a paper has been plagiarized, but instead provides instructors with a report regarding how similar your text is to other sources. Your privacy is protected under the agreement between the University and iParadigms.

The exams will be graded by the TAs with guidance from the faculty, and grades will be posted. If you would like us to re-evaluate the score on your final due to an error in calculating your score or if you believe there is a significant mistake in grading, please contact your professor by email within 1 week after the exam scores are posted. Requests after that point will not be considered. In your request, please explain your reasons in detail. Please do not forget to include your section number and Penn ID number with your request.

- Calculation errors will be corrected immediately.
- If you are challenging the points you receive for a given answer, we shall examine your explanation for why you believe you deserve a higher score, and if it is reasonable, we shall re-grade the entire exam, not just the part you identified; therefore, your final score might go up or down, or remain the same.

■ Policy on using outside sources of information

Do not use any outside information when preparing for case discussions, producing written case analyses or completing the final exam. Outside sources of information include the library, the mass media, the Internet, and, on group-based assignments, any people outside of your learning team. If you use other sources, you are cheating yourself as well as other students.

For course topics in general, in contrast, you are obviously welcome to use outside sources to expand your knowledge.

■ Learning team case write-ups

1. Case Citibank India Credit Cards: Strategy for Profitable Growth
2. Case: TaKaDu

OBJECTIVE

Case write-ups provide you experience in: (1) defining marketing problems, performing appropriate analyses and crafting marketing plans, (2) developing oral and written communication skills, and (3) developing skills to work effectively and efficiently in teams.

CASE ASSIGNMENT

Recommend a **specific** plan of action for these firms. Be sure your analyses and recommendations address the problems explicitly mentioned in the case. In addition, your definition of the problem and your analyses may reveal other important issues you believe must be addressed. Your recommended marketing plan should be based on appropriate and defensible analyses.

PAPER FORMAT

Each write-up should be **no longer** than 1,500 words (regardless of type font, spacing, etc.).

Be sure to include your course section number, learning team number and names of all team members on the cover page. Use your word processor to count the words and report the final count on the cover page. Leave the rest of the cover page blank, beginning your write-up on the second page. Up to **four** additional pages of exhibits beyond the 1,500-word limit are permitted. The style and structure of the text and exhibits is up to you, but **one** of the exhibits should be a sample advertisement that illustrates your chosen **positioning** for the product or service.

Exhibits should be clearly titled, and included only if they provide supporting details for your analyses and recommendations. They should not introduce new ideas that are not explicitly presented in the text. Quantitative analyses must be clear and show the calculation in full with precise explanations (e.g., footnotes that describe the methods and assumptions used). Key conclusions from the exhibits should be discussed in the text, and references to your exhibits should be made as appropriate places in the text (“see Exhibit A”). Write-ups where some team members prepare the exhibits while others do the writing without coordinating the two typically lead to a disjointed analysis. You should not reproduce any exhibits that are in the case study, although, of course, you may use information in case exhibits and you should reference them when you do (“from case Exhibit 3”).

It is generally a good idea to follow the 5Cs, STP, 4Ps framework used in class when writing your papers. The best papers will also typically consider several strategic alternatives that emerge from their analyses, making a case for why their preferred course of action is the best one to pursue, and then detail that course of action in their target market choice, positioning statement and 4Ps presentation.

CLASS PRESENTATIONS AND DISCUSSION

Presenting teams should be prepared to give a 5-minute presentation plus Q&A that covers only their recommendations and a concise rationale for those recommendations.

- One of the slides in the presentation should be a sample television, magazine, or online advertisement or other type of marketing communications example that conveys to customers the product **positioning** that you intend with recommended strategy. This slide should also be one of the exhibits in your write-up. The purpose is to provide an interesting and relevant focus for the presentation – this does not mean that this advertisement should be central to your written analysis – that’s for you to decide. In general, the **positioning idea** is what counts, not your artistic abilities.
- One of the slides should contain at least one clearly-labeled and explained **calculation** you performed, since it’s likely that only the end-result of this calculation will be shown in other slides.

Non-presenting teams should be prepared to ask questions in class of the presenting teams. These questions will often seek clarification on a team’s reasoning behind a specific point in their plan. The tone of these questions should be one of curiosity and engagement, not interrogation.

Important Note: There should be only **two** files submitted on Canvas: the write-up you are submitting and the presentation slides.

ORAL PRESENTATION AND THE WRITE UP

Because only ½ of the learning teams present each case, your team’s case write-up grade will be based on the written paper you submit.

One of the goals of MKTG 611 is to provide you with opportunities to improve your skills in written and oral *communication* (case write-ups and presentations). If you would like feedback from an instructor in the Communication Program, before you submit your case write up or presentation, please contact Larry Quartana (quartana@wharton.upenn.edu; 215-898-5331) to schedule an appointment.

Similarly, your in-class group presentations will be recorded. If you would like feedback after you have completed the assignments, please contact Larry Quartana to schedule an appointment.

FINAL EXAM REVIEW SESSIONS

The faculty will conduct final case exam review sessions. Details regarding dates, times and locations of these review sessions are TBA and will be updated on Canvas and announced in class.

■ **Ethics Matrix**

Individual Cases & Projects	
Working with Learning Team	Yes
Working with Other Classmates	Yes, but not encouraged
Discussing with Other Classmates	Yes, but not encouraged
Consulting Material from Former Students (e.g., formula sheets, solutions, old exams, etc.)	No
Using Material from External Sources* (e.g., reports, articles, books, online research, etc.)	No
Group Cases & Projects	
Working with Learning Team	Yes
Working with Other Classmates	No
Discussing with Other Classmates	No
Consulting Material from Former Students (e.g., formula sheets, solutions, old exams, etc.)	No
Using Material from External Sources* (e.g., reports, articles, books, online research, etc.)	No
Take-Home Tests & Exams	
Working with Learning Team	No
Working with Other Classmates	No
Discussing with Other Classmates	No
Consulting Material from Former Students (e.g., formula sheets, solutions, old exams, etc.)	No
Using Material from External Sources* (e.g., reports, articles, books, online research, etc.)	No
Consulting Textbook / Class Notes	Yes
Using a Formula Sheet / Note Sheet (consult syllabus or professor for size/format/source req'ts)	Yes
Using an Approved Calculator	Yes
Using a Computer / Programmable Device	Yes
Saving a Copy	Yes

* Note that all borrowed content should be cited as appropriate.

Course Outline MKTG 611

Pre-Session. How to Prepare a Marketing Case: Kodak FunTime Case

This class session will provide students with insights regarding how to prepare for cases in MKTG 611 and other courses, will provide a glimpse of what a typical in-class case discussion might look like and will illustrate some simple but useful quantitative methods that can be used to improve case analysis.

Preparation Questions:

1. Why is Kodak losing market share in the case?
2. What might be some short-term options available to Kodak (at the time of the case) to prevent market share loss?
3. Evaluate the viability of the following options:
 - a. a 15% reduction in the price of Gold
 - b. Doubling advertising expenditures to \$100million
4. A brand like Funtime is often referred to as a “fighting” or “flanker” brand. What issues should a major brand like Kodak be sensitive to when it launches such a flanker brand?

Reading Assignment: 1. A Note on Break-Even Analysis, 2. A Note on Contribution Analysis

Session 1. Introduction, Analyzing Markets and Customers (I)

This class discusses the role of marketing in the firm. It focuses on the importance of segmenting the market and creating a clear positioning statement.

Reading Assignment: 1. A Note on Positioning

Session 2. Analyzing Markets and Customers (II)

This class explores more detailed approaches to market analysis, including models of customer decision making and customer lifetime value (CLV).

Reading Assignment: 1. A Note on Contribution Analysis, 2. A Note on Customer Lifetime Value [CLV]

Session 3. Unilever Brazil Case

Preparation Questions:

1. Prepare a positioning statement for Unilever’s offering in NE Brazil.
2. Develop a marketing plan covering all decisions the company is struggling with. These are clearly described in the case. Be specific about product (brand, formulation, packaging, etc.), price, types of distribution and marketing communication.
3. How much cannibalization can your proposed product cause before becoming unprofitable?

Reading Assignment: 1. A Note on Break-Even Analysis

Session 4. Branding

In this session we examine how brands can affect consumer behavior, which in turn provides insights into the importance of building brand equity and the risks and benefits of some branding practices, such as brand extensions.

Reading Assignment: A Note on the Financial Approach to Brand Valuation

Session 5. Bank of America: Mobile Banking Case

This case provides an opportunity to apply many of the concepts covered to date in MKTG 611 such as positioning, customer decision-making processes and CLV. While the immediate decision in the case pertains to the design of a mobile app, the main purpose of the case is to examine how deep customer analysis can guide a company to better understand, respond to and capitalize on an emerging business opportunity.

Preparation Questions:

1. What should BofA's mobile banking strategy be?
 - a. Should BofA offer multiple apps for different lines of business? If so, which new apps would you develop and in which order?
 - b. Should BofA offer a single app with enhanced features? If so, which new features would you add and in what order?
 - c. Should BofA keep the current app as is?
2. How should BofA's mobile banking be positioned in the long run?
3. What factors should be considered when making these decisions?

Session 6. Case Write Up and Presentation:

Citibank India Credit Cards: Strategy for Profitable Growth

Each team should upload a docx or PDF copy of its case write up by 8:00 a.m. to Canvas. **Only even numbered** learning teams will present this case; these teams should also upload a pptx or PDF file for its presentation to Canvas by 8:00 a.m.

Session 7. Pricing

In this session we will discuss assessing customers' willingness to pay (economic value to the customer), measuring price sensitivity, and psychological aspects of pricing.

Reading Assignment: A Note on Economic Value to the Customer [EVC]

Session 8. Rohm and Haas Case

Preparation Questions:

1. What factors should be taken into account in setting a price for Kathon MWX?
2. What price do you recommend for Kathon MWX?
3. Come to class prepared with a marketing plan for Kathon MWX including: Positioning (target segment, POD, FOR), Price (and a rationale for the price), Distribution and Promotion.

Session 9. Live Case Discussion:

Neil Blumenthal Co-Founder and Co-CEO, Warby Parker

Session 10. Distribution

This session examines how to design and coordinate distribution channels.

Session 11. Case Write-Up and Presentation: TaKaDu

Each team should upload a docx or PDF copy of its case write up by 8:00 a.m. to Canvas. **Only odd numbered** learning teams will present this case; these teams should also upload a pptx or PDF file for its presentation to Canvas by 8:00 a.m.

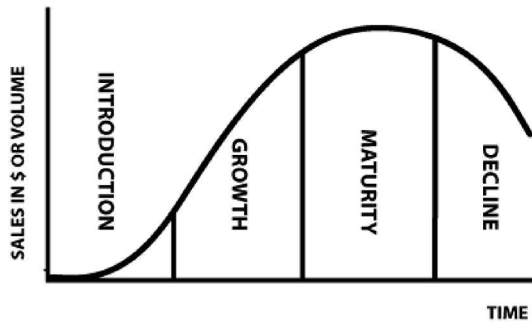
Session 12. Marketing Communications

This session provides an overview for the role of advertising as a key element of the communication mix and provides a step-by-step framework for making advertising decisions.

FINAL EXAMINATION

Marketing Management: Strategy (MKTG 612)

■ Description



This course focuses on helping you refine your skills in developing a marketing strategy and seeing how the marketing tactics selected need to be in alignment with that strategy. We will focus specifically on issues such as the selection of which businesses and segments to compete in, how to allocate resources across businesses, segments, and elements of the marketing mix, as well as other significant strategic issues facing today's managers in a dynamic competitive environment.

All of these issues will be discussed and couched in the context of the dynamic nature of market evolution that occurs throughout the Product Life Cycle (PLC), pictured above. Students will develop strategic thinking skills and learn to apply analytical tools to help formulate effective marketing tactics in each phase of the PLC.

■ The Marketing Management: Strategy Waiver Process

WAIVER BY CREDENTIAL

DEADLINE: See Waiver by Credential table in Introduction to this Waiver Guide

Waiver by credentials will be given only to students with:

1. Completion of a full-term marketing simulation using SABRE or a close parallel (e.g., Markstrat) within the past 5 years; or
2. Within the past 5 years did you complete and receive a grade of A or better in a course at a four-year college that included a minimum of 6 weeks of exposure to cases/lectures on marketing strategy, taken either as part of a semester long marketing fundamentals course or an advanced marketing course?

To substitute MKTG 612 or MKTG 613 by an upper-level elective marketing course of 0.5 credit units or more which must be taken for a grade, the student must have earned a grade of "A-" or better.

Documenting Your Credentials

Supporting credentials must include course syllabi of all previous Marketing courses and a transcript with courses and relevant grades highlighted.

WAIVING BY EXAM

There is no waiver exam for this class.

■ Fulfilling the Marketing Flexible Core Requirement

Please note that to fulfill the MKTG flexible core requirement, students are required to take either MKTG 612 or MKTG 613 (students also have the option to take both if they have the interest).

A waiver by credential of MKTG 612 or MKTG 613 will fulfill this requirement; students do not have to submit credentials to waive both.

Syllabus MKTG 612

■ Outline of Each Class Session

While the exact structure of each class will vary depending on whether it is a case or lecture, in general each session will have three facets:

1. **The real world business problem.** Most classes will begin with an example of a critical *current* issue that managers confront. This could be either a formal case, or a mini-case. For formal case discussions, we will assume that everyone has read and is prepared to discuss the case. It is not necessary to do any library work or bring in outside information about the company or the industry beyond what is described in the case. In fact, it will distract from the case discussion as we are learning how to make better strategic marketing decisions given the information available at the time of the case. We will focus on principles, theories, and basic applications of marketing strategy. Discussion and questions are strongly encouraged.
2. **Analytical frameworks for thinking through the problem.** For the business problem being discussed, the class will explore a range of general analytic frameworks through which the problem might be approached, and evaluate their comparative strengths and weaknesses. The purpose of this is to provide a systematic basis for narrowing down the set of candidate options, and choosing a best option in light of available data.
3. **Informing the decision through data.** Given a general analytic framework, most classes will go on to explore how greater precision can be brought to their application through the use of data — both in the form of customer insights (marketing research), and secondary data.

■ Course Materials

Course materials will be available at www.study.net and on the course Canvas site.

■ Course Website

Many of the course's activities will involve the use of Wharton's Canvas software, which you can access at: <https://wharton.instructure.com/login>

Please bookmark this website and check it as often as necessary. This site will contain copies of class handouts, and other general information about the course.

■ Grading

The weighting of the inputs for the final course grade is:

Class Participation	25%
Midterm Examination (take home)	40%
Final Assignment (take home)	35%

Missing more than two sessions (unexcused) will result in an automatic loss of your full class participation grade (i.e. you will receive 0 of 25%).

CLASSROOM PARTICIPATION

All course sessions involve active classroom discussion based on careful preparation of the readings and cases, with a focus on both theoretical questions and practical implications. You should be prepared both to share your ideas and to listen to and interpret issues presented by others. *The quality of your contribution counts for much more than the quantity.* Comments that move a discussion forward in a productive direction are particularly welcome.

In each class, your participation will be scored on a 0-4 scale, first by the TA in attendance and then adjusted by me after class. Students who are seated in class at the regular start time would initially receive a CP score of “2”, and this value could then be either increased (or possibly decreased) based on the quality of your discussion/contribution. Students who arrive late would initially receive a CP score of “1”. An unexcused absence from a class will be scored a “0”.

Also included in your class participation grade are numbers that are due for the Medicine’s Case and Canadian Children’s Cereal Case, your 1-page article on “Customer Analytics in the News”, and participating in the FutureView Simulation. All of these assignments are due PRIOR to the class in which they are covered, and the due dates are clearly listed on the course calendar. **No late assignments will be accepted.**

If you have documentable special circumstances such as time conflicts between multiple exams, illness, or grave personal difficulties such as a death in the family, you should petition the MBA Program Office, which will work with me in appropriate cases to find a resolution. The MBA Program Office will require documentation of your conflict as a matter of course.

If you find yourself with a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Employers cannot require a student, as a condition of his or her employment candidacy, to participate in recruiting-related activities at a time that conflicts with his or her academic schedule. An employer’s inflexibility on this issue is considered a violation of Wharton’s recruiting policies. A time conflict due to a job interview, a career pursuit or travel is not an appropriate reason to request accommodation on an academic commitment.

■ Assignments and Examinations

ASSIGNMENTS

The links for the Medicine's company numbers, CCC case assignment, "Customer Analytics in the News", and FutureView will all be in the course Canvas site. Each of these assignments will also be discussed in the lecture that precedes their due date.

All assignments should be submitted via Canvas, and/or the weblink on Canvas that provides a form for submitting numbers.

MIDTERM EXAMINATION

The midterm examination for this course will be a take-home examination. It will be made available on the course Canvas site. The exam will consist of short essay questions about marketing strategy, and will also cover the cases that we have discussed in class (up until this point). In particular, the first six lectures of material in the course are covered. From the time that you start the examination (not download, but start), you have 2 hours to complete it. You must then upload your answers to the canvas site prior to the due date. The Wharton School and University of Pennsylvania Honor Code applies. This is an individual-level examination. You are not allowed to discuss this exam with anyone, during or even after the examination period. You may use outside materials, and it is openbook and open-notes, but note that the 2 hour time limit includes any time you might use to do outside research, look at your notes, etc....

FINAL ASSIGNMENT

You have one of three options for your final assignment. There is no advantage, or disadvantage, from a grading perspective by choosing any of the three. My intent is to allow flexibility so that you choose the final assignment that best fits your skill set.

OPTION 1: Imagine that there was an additional lecture in MKTG 612. Create a powerpoint deck, with graphics, content (text), builds/animations, etc... that would reflect that content. The powerpoint deck should be no more than 35 slides in total. Your grade will be based on the choice of topic area, the content of the slides, the coherence of the layout, and the presentation style.

OPTION 2: While we covered numerous cases in the course (Kindle Fire, Shell Oil, Medicines Company, Canadian Children's Cereal, and Aqualisa Quartz), one could imagine other cases that would add to the course content going forward. Your assignment is to write a mini-case that is complete with exhibits (tables and figures), questions for readers, and a "teaching note" (instructing a professor how to teach the case and the key takeaways) that would add to the content of MKTG 612. The case should be no more than 15 pages (including the figures and tables) and the teaching note should be no more than 5 pages.

OPTION 3: Choose from one of the topics below and write a paper on this subject.

1. How do you measure the financial return of social media? Provide a roadmap of how to assess the financial returns of social media efforts. Use a specific example.

2. How should a firm decide between how much to spend on traditional advertising versus online advertising? Create a process for making this evaluation.
3. Market sizing and product diffusion plays a very significant role in marketing strategy. If you were Apple Inc, how would you forecast the number of units sold, price elasticity, and diffusion curve for next i-device?

This report should not exceed fifteen double-spaced typewritten pages (including tables and appendices).

Course Outline MKTG 612

- Session 1:** Overview of Strategic Marketing Issues
Case: Kindle Fire
- Session 2:** Market Research for New Product Design
Case: Shell Oil (mini-case + in-class)
- Session 3:** Social Media and Product Diffusion
 Social Media Question due previous day
- Session 4:** Pricing for New Product Launch
Case: The Medicines Company (A)
 Medicine's Case numbers due previous day
- Session 5:** Pioneering v. Follower (Entry Strategy)
- Session 6:** Competing in the Growth/Mature Phase
- Session 7:** Dealing with Competition
Case: Canadian Children's Cereal
 CCC case assignment due previous day

MIDTERM EXAMINATION DUE

- Session 8:** Multi-Product Resource Allocation
- Session 9:** Customer Analytics for CLV growth in mature markets
 "Customer Analytics in the News" due two days prior
- Session 10:** Marketing in the Decline Stage
- Session 11:** Marketing for Products of the Future
 FutureView Simulation due two days prior
- Session 12:** Selecting the Entire Marketing Mix/Course Wrap-Up
Case: Aqualisa Quartz

FINAL ASSIGNMENT DUE

Strategic Marketing Simulation (MKTG 613)

■ Description

Marketing 613 is an intensive immersion course designed to develop skills in formulating and implementing marketing strategies for brands and businesses. The central activity will be participation in a realistic integrative product management simulation named SABRE. In SABRE students will form management teams that oversee all critical aspects of modern product management: the design and marketing of new products, advertising budgeting and design, sales force sizing and allocation, and production planning. As in the real world, teams will compete for profitability, and the success that each team has in achieving this goal will be a major driver of the class assessment.

The SABRE simulation is used to convey the two foci of learning in the course: the changing nature of strategic problems and their optimal solutions as industries progress through the product life cycle, and exposure to the latest analytic tools for solving these problems. Specifically, SABRE management teams will receive training in both how to make optimal use of marketing research information to reduce uncertainty in product design and positioning, as well as decision support models to guide resource allocation.

■ The Marketing Management: Strategy Waiver Process

WAIVER BY CREDENTIAL

DEADLINE: See Waiver by Credential table in Introduction to this Waiver Guide

Waiver by credentials will be given only to students with:

1. Completion of a full-term marketing simulation using SABRE or a close parallel (e.g., Markstrat) within the past 5 years; or
2. Within the past 5 years did you complete and receive a grade of A or better in a course at a four-year college that included a minimum of 6 weeks of exposure to cases/lectures on marketing strategy, taken either as part of a semester long marketing fundamentals course or an advanced marketing course?

To substitute MKTG 612 or MKTG 613 by an upper-level elective marketing course of 0.5 credit units or more which must be taken for a grade, the student must have earned a grade of "A-" or better.

Documenting Your Credentials

Supporting credentials must include course syllabi of all previous Marketing courses and a transcript with courses and relevant grades highlighted.

WAIVING BY EXAM

There is no waiver exam for this class.

■ Fulfilling the Marketing Flexible Core Requirement

Please note that to fulfill the MKTG flexible core requirement, students are required to take either MKTG 612 or MKTG 613 (students also have the option to take both if they have the interest).

A waiver by credential of MKTG 612 or MKTG 613 will fulfill this requirement; students do not have to submit credentials to waive both.

Syllabus MKTG 613

■ Pedagogic Approach

The learning objectives of the course will be achieved through a blend of large-group common lectures, small group consulting interactions with faculty, and independent team work on the SABRE simulation. While the exact structure of each day varies somewhat (see course schedule below), the general format is:

1. **Large-group Lecture.** The goal of each the large-group lecture is to provide both common exposure to tools and frameworks that can be used to make decisions in the SABRE simulation, as well as how these tools are used in the real world. More specifically, early in the week lectures will focus more on analytic topics as how to interpret and apply marketing research information, while later in the week lectures will focus on how strategies should be modified as consumer tastes change and competition becomes more intense---two central features of business dynamics that arise both in SABRE and the real world.
2. **Application of Lecture ideas to SABRE.** After each lecture the class will be broken up into smaller management teams who will review the results of their latest decisions and plan their next decision. Each lecture will be designed to provide a new set of formal tools or frameworks that can be used to aid decision making at that stage in the simulation, and teams will have the opportunity to immediately apply these ideas.
3. **Team-based consulting meetings.** During the course of independent group work faculty will schedule short meetings with each team. The goal of these meetings is to give faculty an opportunity to customize the application of the day's lecture materials to each team's particular strategic situation, as well as for each team to seek faculty guidance on how they might ideally proceed in the simulation.

■ Course Materials

All course materials will be available on Canvas (Files Folder)

■ Grading

The weighting of the inputs for the final course grade is:

SABRE Performance	
Periods 1-3	40%
Periods 4-6	40%
Final SABRE Memo and Presentation	20%
Total	100%

DETAILED COURSE EVALUATION CRITERIA

1. Measuring SABRE Performance

Your team's performance in the SABRE simulation will constitute a major part of your grade. The primary measure we will use is the net cash flow generated by your business ("Cumulative Net Contribution"), which you will be striving to maximize within your virtual industry. Each industry will have six independent teams with different starting positions.

In order not to discourage any team prematurely, we will measure and grade your SABRE team based on Cumulative Net Contribution at two points in time, first for the early three decisions (periods 1-3) and then again for the later three decisions (periods 4-6). This will give us the possibility to reward turnarounds and penalize "fizzle-outs." Hence, you will receive two scores which will then be averaged for your grade in this component of the course.

When your SABRE decisions have been run, you will receive an email. Then, you may download your results and data for the next round of decisions. See the course outline at the end of the syllabus for specific dates and times.

2. Final SABRE Memo –TEAM ASSIGNMENT

Discuss the evolution of your strategy as the simulation progressed. This report should address three major aspects:

1. Your initial your market position, including your products, competitors, and potential for growth. In doing so, consider questions such as: How did buyer-preferences vary throughout the market? What were the principal strengths and weaknesses of your firm and its starting position? What was your strategy based on this analysis?
2. Your final market position, including your products, competitors, and discuss how your strategies have changed over time in response to competition, industry evolution, and other strategic dynamics. Write this memo as if the audience were the next marketing management team that will be taking over your firm in the next hypothetical period. Discuss strengths and weaknesses, "blind spots" that you missed, and things that you would do differently. Describe briefly the strategy you foresee for your firm in the next hypothetical six periods. Please provide a clear statement of your firm's future objectives, strategies and tactics looking forward, based on what you have learned throughout the 613 course. This report should use the results through round five decisions made by each team.
3. **In addition, provide a forecast of what you predict will be your team's period-six dollar market share will be within the Regalto and Innovo markets** (actual performances will be revealed in the last class).

This report should not exceed SIX double-spaced typewritten pages (not including tables and appendices) and 10 pages in total.

Course Outline MKTG 613

Session 1: **Common Lecture:** Opening Class Overview:
The Mechanics of the Sabre Simulation

Session 2: SABRE Decisions and Faculty consulting meetings

Session 3: Optional Large Group Q&A session

Session 4: SABRE Decisions and Faculty consulting meetings

SABRE Decision 1 Due

Session 5: **Common Lecture:** Marketing Research for Strategic Decision Making

Session 6: **Common Lecture:** Optimal Resource Allocation

Session 7: Decisions and Faculty consulting meetings

SABRE Decisions 2-4 Due

Session 8: SABRE Decisions and Faculty consulting meetings

SABRE Decision 5 Due

Session 9: **Common Lecture:** Target-market selection and new-product Launch decisions,
PLC Forecasting

Session 10: SABRE Decisions and Faculty consulting meetings

SABRE Decision 6 Due

Session 11: SABRE Final Report, Presentation Preparation

Session 12: **Common Class:** team presentations, summary, share results across industries

Operations Management: Quality and Productivity (OPIM 611)

■ Course Description

Matching supply with demand is an enormous challenge for firms: excess supply is too costly, inadequate supply irritates customers. In the course, we will explore how firms can better organize their operations so that they more effectively align their supply with the demand for their products and services. Throughout the course, we illustrate mathematical analysis applied to real operational challenges — we seek rigor and relevance. Our aim is to provide both tactical knowledge and high-level insights needed by general managers and management consultants. We will demonstrate that companies can use (and have used) the principles from this course to significantly enhance their competitiveness.

In OPIM 611, the emphasis is on the design of business processes to maximize productivity and to achieve world-class quality. The course details different kinds of business processes and explains how to measure key process parameters like capacity and lead time. The course also covers process improvement and examines classic ideas in quality management.

■ The OPIM 611 Waiver Process

WAIVING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide

OPIM 611 can be waived based on academic credentials if ALL the following criteria are met: a) the course has the word “Operations Management” in the title (Operations Research, Quality Management, Industrial Engineering, etc. do not count); b) the course was taught at a business school and included at least some case work; and c) the student obtained a grade of B or better.

WAIVING BY EXAM

EXAM DATE: Waiver and Placement Exam Schedule, and a sample exam with solutions can be found in the Waiver Exam Guide.

To register for the OPIM 611 waiver exam, students must submit documentation showing: a) relevant work experience related to process management (e.g. black belt training, lean transformation); or b) experience in related courses (e.g. industrial engineering, operations research, production). Students must meet the above criteria in order to be allowed to register for the waiver exam.

Exam Preparation

See *Waiver Exam Guide*. The exam is based on Chapters 1-8 of Cachon, G. P. & Terwiesch, C. 2009. *Matching Supply with Demand: An Introduction to Operations Management*, Boston, MA: McGraw Hill.

Syllabus OPIM 611

■ Overview

See Course Description on previous page.

■ Course Policy

This syllabus provides details on course policy and the schedule for OPIM 611. Students should read this material carefully at the start of the course.

■ Grading

Each student's final numerical score for each course is based on the following items and weights:

Homework assignments	15 pts
Attendance	12 pts
Class participation	20 pts
Final exam	64 pts

We add up the points from these grading ingredients to compute a total score. We then use the standard Wharton MBA grade distribution to translate the points into the final grades.

HOMework ASSIGNMENTS

- There are three homework assignments for the course.
- Every homework question carries the same weight.
- Assignments are due by 8:00 a.m. of the due date. All homework must be submitted electronically through Canvas.
- Each student must turn in his or her own assignment. We encourage students to attempt to complete the assignments on their own. However, to promote learning, students are allowed to discuss each assignment with other students in their cohort.
- Partial credit is not given. Please follow the format outlined in the homework.

CLASS ATTENDANCE AND PARTICIPATION

- You are expected to attend class and be in class on time.
- Attendance is worth 1 point per class session. To receive this point, you must be in your seat at the start of class (there is no grace period) and you must remain throughout the session.
- 2 points will be deducted for each absence beyond and including the third session missed.
- Physical presence is necessary but not sufficient to ensure a good class participation score.

The class participation score is based on your contribution throughout the entire course. To contribute during case discussions, you must read cases carefully before coming to class and be prepared to discuss and defend your recommended actions.

FINAL EXAM

- There is a final exam based on the contents of the course: analytical tools, case discussions, lectures, etc.
- The format of the final exam is open book and open notes.
- See “Use of Electronic Devices” below for details regarding computer usage during the final.

■ Course Text, Readings and Handouts

All lectures will follow the textbook by Cachon and Terwiesch very closely. The relevant chapters for each session are listed later on in this document.

We have created a custom published text that includes the chapters of Cachon and Terwiesch that are relevant for OPIM 611. This custom published text is based on the third edition of the book. **Please go to the bookstore to get a copy of the book (NOT Wharton Reprographics).**

Cases are available via Study.net.

Note that all other course material (slides, etc) will be posted on Canvas. If you want to get a copy of the textbook from another source (2nd year student, Amazon, used book, etc), here is the reference:

Cachon, G. P. & Terwiesch, C. *Matching supply with demand: An introduction to operations management* 3rd Ed. Boston, MA: McGraw Hill.

The e-book version (example: Kindle) will not be permitted for use during the final exam, which is open book.

■ Use of Electronic Devices

The following states our policy with respect to the usage of electronic devices during class time and during the final exam.

In class, students are allowed to use laptops and tablets only for work directly related to the class (no email, no other work); at some classes, the faculty will ask you to come to class with a computer.

In the final exam, you may not use an electronic device that can communicate with another device (e.g., phones, computers, tablets, etc.) You may use a traditional calculator (assuming it does not communicate with other devices).

All phones should be turned off / be muted.

■ Ethics Matrix

	Materials							People			
	Approved calculator	Laptop / other electronics	Summary sheet	Current book / class notes	Past notes / summaries	Past exams / assignments	Internet content / other outside materials	Learning team / approved work team	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term
Homework	A	A	A	A				W ¹	W	W	
Cases	A	A		A				W ²	W	W	
Final Exam	A ³		A	A							

A = Allowed material W = Allowed to work together Shaded Cell = Not allowed

1. Students are encouraged to test their understanding of the material by working on the homework individually. Once the student has diagnosed his/her skill level, communication is allowed
2. Students are encouraged to collaborate on the end-of-chapter problems
3. Computers and devices with network capability are prohibited. Only calculators are allowed.

The information above covers many common situations but will not cover every circumstance.

Remember: The **Wharton MBA Code of Ethics** that you accepted requires, among other things, that you represent yourself and your work honestly, don't try to gain unfair advantage over other students, follow the instructor's guidelines and respect confidentiality of your work and the work of others.

Should you have questions, please contact your ethics liaison or professor.

Course Outline OPIM 611

Session 1. Introduction

Text: Introduction, The Process View

Session 2. Process Flow Analysis

Text: Understanding the Supply Process, Estimating and Reducing Labor Costs

Session 3. The Operations – Finance Link

Text: Link between Operations and Finance, Multiple flow units

Session 4. Process Flow Analysis

Case: National Cranberry

HOMEWORK #1 DUE

Session 5. Lean Operations

Exercise: Electronics Assembly

Text: Lean Operations

Session 6. Lean Operations in Services

Case: Capital One

Session 7. Managing Variability: Waiting Time Problems

Text: Variability and its Impact on Process Performance: Waiting Time Problems (except section 3)

Session 8. Managing Variability: Waiting Time Problems

Case: Call Center

HOMEWORK #2 DUE

Session 19. Managing Variability: Throughput Losses

Text: Variability and its Impact on Process Performance: Throughput Losses

Session 10. Quality Management, Six Sigma

Text: Quality Management, SPC, and Six Sigma

Session 11. Quality Management

Case: Toyota Production System

Session 12. Review Session

HOMEWORK #3 DUE

FINAL EXAM

Regression Analysis for Business (STAT 613/621)

■ Course Description

These courses develop ideas for helping to make management decisions using regression analysis a fundamental statistical methods. The ideas in this course reappear in many other MBA classes, and are part of the basic “tool kit” expected of all MBAs in their careers.

Specific important topics covered include least squares estimation, residuals and outliers, tests and confidence intervals, correlation and autocorrelation, co-linearity and randomization. The presentation relies heavily on computer software for most of the needed calculations, and the resulting style focuses on construction of models, interpretation of results, and critical evaluation of assumptions.

■ The Statistics (STAT 613/621) Waiver and Placement Process

The Statistics Department recognizes the varying degrees to which incoming students have been exposed to statistical analysis in a classroom setting. While we encourage only those students who have recently completed substantial work in statistics to waive core course work entirely, we recognize that some students are equipped to begin their study of statistics at a more advanced level. We therefore invite those students who have studied statistics prior to matriculation at Wharton to consider the half-credit unit course, STAT 621, which covers the statistical methodology known as regression analysis and presupposes a student's knowledge of the fundamental methods of statistical analysis.

For data on the percentage of last year's entering class who waived STAT 613, see the Waiver Statistics table in the Introduction to this *Waiver Guide*. You will note that all but a few of those who waived did so by passing a waiver examination scheduled before Pre-Term.

WAIVING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide.

Very few students (typically fewer than 20 each year) waive statistics by credentials. The students who are granted waivers-by-credential possess an extensive background in statistics, such as an undergraduate degree in statistics. The analogy is that of a CPA waiving accounting by credentials. Students allowed to waive STAT 613 must have:

at least four college courses in statistics. Of these four courses, at least two must cover regression analysis (if you completed a regression course as a part of the CFA requirement, it can count as one of the two regression courses). The application for waiver by credential must include syllabi that describe the courses covering regression.

AND

have received a grade of A- or better in both courses that cover regression analysis and a grade of B or better in the other two courses.

AND

two of the four courses were taken within the last seven years.

WAIVING BY EXAM

EXAM DATE: Waiver and Placement Exam Schedule, and a sample exam with solutions can be found in the Waiver Exam Guide.

Most students who pass the waiver exam will have recently completed a full-year course in business statistics that heavily emphasized regression analysis. Be aware that the waiver exam, like STAT 613, focuses upon the interpretation and critique of statistical results with most of the calculation left to the computer. For example, the waiver exam includes questions regarding the violation of assumptions that underlie regression coefficients. Students who are able to pass the waiver exam tend to share the following characteristics:

1. They have had a course in regression within the past two or three years;
2. The focus of their course work has been the interpretation and critique of statistical methods rather than the memorization of formulas and grind-it-out calculation;
3. They understand the underlying assumptions of statistical procedures like regression and know how to check the assumptions;
4. They are familiar with multiple regression in particular and some features of the analysis of variance.

The waiver examination itself is open-book, with a limit of one textbook. You are also permitted to bring a calculator to the waiver exam, though it will not be very useful.

PLACING INTO STAT 621 BY EXAM

EXAM DATE: Waiver and Placement Exam Schedule, and a sample exam with solutions can be found in the Waiver Exam Guide.

Students who possess a mastery the concepts outlined in the prerequisites for the STAT 621 course must prove that mastery by passing a placement exam administered prior to Pre-Term in order to register for STAT 621. Students may not place into STAT 621 by credential. The placement examination itself is open-book, with a limit of one textbook. You are also permitted to bring a calculator to the placement exam, though it will not be very useful.

Placement Exam Preparation

Students who wish to review the prerequisite material for STAT 621 and thus prepare for the placement exam are encouraged to enroll in STAT 608, a preparatory course for the placement examination, which will be held before Pre-Term. Students who intend to sit for the placement exam are encouraged though not required to participate in the preparatory course. Registration for this course will take place during Pre-Term registration.

Syllabus STAT 613

■ Overview

This course provides the fundamental methods of statistical analysis, the art and science of extracting information from data. The course will begin with a focus on the basic elements of exploratory data analysis, probability theory and statistical inference. With this as a foundation, it will proceed to explore the use of the key statistical methodology known as regression analysis for solving business problems. These methods and their application will reappear in many other MBA classes and are part of the basic “tool kit” expected of all MBAs in their careers.

■ Source Material

REQUIRED

- Class Notes. These can be downloaded directly from the STAT 613 Canvas e-room. They will be published in weekly installments.
- JMP 11 (software), SAS Institute, downloadable from <http://upenn.onthehub.com>.
- Stine and Foster, *Statistics for Business*, Addison Wesley.

OPTIONAL (on reserve at Lippincott Library)

- Sall, Creighton, Lehman, *JMP Start Statistics*, 5th edition, SAS Institute.
- Freedman, Pisani and Purves, *Statistics*, 4th edition, Norton.
- Keller, *Statistics for Management and Economics*, 8th edition, South-Western Cengage Learning.
- Ellenberg, *How Not To Be Wrong: The Power of Mathematical Thinking*. 2014, Penguin Press. (Not on Reserve).

The fundamental material for the class is contained in the Class Notes, which will be discussed and elaborated in the class lectures. The Stine and Foster (SF) textbook elaborates on most (but not all) of the Class Notes. Links to the relevant readings in SF appear throughout the Class Notes. For those who would like further background materials, we recommend Sall, Creighton and Lehman (SHL), Freedman, Pisani and Purves (FPP) and Keller (K). SHL is an example-rich guide to statistical analysis with the statistics package JMP. FPP is a highly verbal and conceptual book — an excellent introduction both for “poets” who are unfamiliar with technical readings and for “quants” who would like a better sense of the reasoning behind statistics. K is in the style of a traditional “reference manual” and explains details and provides many formulas for statistical procedures that are not covered in class.

JMP is the computer package we’ll use extensively for statistical calculations and graphics. In particular, an essential component of STAT 613 will be project work requiring substantial use of JMP. Although JMP is merely a tool and not the central point of the course, it is sufficiently useful that you will need it.

■ Class Preparation

As soon as possible, you should obtain and install JMP. Before each class, you should review the material from the previous class and you should skim the Class Notes that will be covered. This is a course that builds upon itself and it is crucial to not fall behind. The classes focus on critical interpretation of results and analysis of assumptions. We use JMP to carry out the computations, although the software itself is not the main focus of the course.

You should also read the relevant sections of the SF textbook as annotated throughout the Notes and shown in this syllabus. We strongly recommend that you review the exercises that conclude each chapter. The exercises in each chapter of the SF textbook begin with matching, true/false, and conceptual questions. You should routinely skim these exercises in every chapter; they review notation and basic properties of the methods covered in class. In addition, the course outline identifies specific additional “you do it” exercises that require data analysis or computation that is related to examples and topics of lectures. These exercises will not be evaluated but are useful for review.

■ Attendance

Attendance is an important aspect of the Wharton commitment. Wharton students are admitted in part because of the experiences they bring to the community that they can add to class discussions. Without attending, learning as a collaborative process cannot exist. Accordingly, absences are only appropriate in cases of personal emergency. In addition, late arrival is disruptive to the learning environment and promptness is expected. Please make note of the start of the term and the time of deliverables and exams as you make travel plans. In case of illness, we require a letter of confirmation from Student Health Services. If you find yourself in a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Absences due to recruiting are not excused. Employers are prohibited from requiring recruiting-related activities (e.g., interviews, events or travel) that conflict with a student’s academic commitments. An employer’s inflexibility on this issue is a violation of Wharton’s recruiting policies.

■ Exercises, Quizzes and Exams

There will be weekly exercises as indicated in the course syllabus. *These exercises will not be collected*, but they are essential for the learning process and you should treat them as a requirement. The textbook supplies brief answers to these questions and office hours are available for further questions.

There will be six in-class quizzes throughout the course. Quizzes will take place on Wednesdays, see the Canvas calendar.

There will be a two-hour midterm and a two-hour final exam.

■ Learning Team Project

A project will be assigned to each learning team during the course. It will entail the statistical analysis of a data for a business application that your team will describe in four installments. It will be possible to complete these installments before the listed due dates, and you are encouraged to submit them early.

This project must reflect the work of only your learning team. You are strictly forbidden from discussing this project with anyone outside your learning team.

■ Teaching Assistants (TAs)

TAs for STAT 613 will hold office hours throughout the course. Times and locations will be posted in the STAT 613 Canvas e-room.

■ Classroom Expectations–Concert Rules

- Class starts and ends on time.
- Sit according to the seating chart (posted online in Canvas).
- Late entry or reentry only under exceptional circumstances.
- Name tents displayed.
- Phones, laptops and other electronic devices turned off. We do permit the use of tablets (e.g., an iPad) for taking notes in class.

■ Grading

Grades for the course will be based on a weighted average of the following components with the stated weights:

Final Examination	35%
Midterm Examination	25%
In-class Quizzes (6)	15%
Project	20%
Concert rules, including attendance	5%

Attendance is mandatory. One unexcused absence is allowed during the semester without penalty; beyond that, each unexcused absence will lower your attendance grade by one point.

Course Outline STAT 613

KEY

SF refers to Stine and Foster, *Statistics for Business*, Addison Wesley.

Session 1: Course Overview, Variation

Key Topics: Histogram, boxplot, mean, median, interquartile range, standard deviation, skewness, logarithm
Reading (SF): Ch 4, SIA p.142
Exercises: 4.55-56, 59; 1-4, p. 147

Session 2: Probability models

Key Topics: Independence, random variable, distribution, expected value, SD and variance
Reading (SF): 7, 9
Exercises: 7.45, 47; 9.35, 37, 43, 49; 4M (p. 217)

Session 3: Normal models

Key Topics: Continuous random variable, quantiles (Empirical Rule), quantile plot, log-normal
Reading (SF): 12
Exercises: 12.39, 41, 43, 49; 4M (p. 286)

Session 4: Association

Key Topics: Contingency table, mosaic plot, chi-squared, Simpson's paradox, lurking variable
Reading (SF): 5
Exercises: 5.39, 43, 45, 53

Session 5: Conditional probability

Key Topics: Dependence, Bayes rule
Reading (SF): 8
Exercises: 8.39, 45, 47, 49

Session 6: Sampling distributions

Key Topics: Simple random sample, iid, Central Limit Theorem
Reading (SF): 13, 14.1, SIA p. 296

QUIZ

Session 7: Confidence intervals

Key Topics: Inference, t -distribution, confidence level, margin of error
Reading (SF): 15
Exercises: 15.39, 43, 49, 51; Submit Project Installment 1

Session 8: Hypothesis testing

Key Topics: Null and alternative hypotheses, Type I and II errors, α -level, p -value, break-even analysis

Reading (SF): 16

Exercises: 16.39, 43, 45, 47

QUIZ**Session 9: Comparing two samples**

Key Topics: Confounding, two-sample t -test, confidence interval for difference

Reading (SF): 18

Exercises: 18.29, 31

Session 10: Comparing dependent samples

Key Topics: Experimental design, paired sampling, covariance

Reading (SF): 6,18

QUIZ**Session 11: Fitting lines to data**

Key Topics: Slope and intercept, fitted values and residuals, r -squared

Reading (SF): 19

Exercises: 19.39, 41, 43, 47

REVIEW LECTURE

Key Topics: Variation, inference, testing

PROJECT INSTALLMENT 2

Submit Project Installment 2

MIDTERM EXAM**Session 12: Fitting curves to data**

Key Topics: Transformations (logarithm, reciprocal), elasticity

Reading (SF): 20

Exercises: 20.31, 33, 35

Session 13: Simple regression model

Key Topics: Parameters, assumptions, basic diagnostics

Reading (SF): 21.1-2

Session 14: Inference for the Simple Regression Model

Key Topics: Tests, confidence intervals, prediction intervals

Reading (SF): 21.3-4

Exercises: 21.39, 41, 43, 47

Session 15: Remedies for common problems

Key Topics: Nonlinearity, dependence, heteroscedasticity, outliers
Reading (SF): 22
Exercises: 22.37, 39, 45; 4M (p. 572)

Session 16: Multiple regression

Key Topics: Scatterplot matrix, marginal and partial slope, path diagram
Reading (SF): 23.1-2

QUIZ**Session 17: Multiple regression model**

Key Topics: R^2 , F -statistic, model profile, diagnostic plots
Reading (SF): 23.3-5
Exercises: 23.39, 41, 43, 47

Session 18: Collinearity in multiple regression

Key Topics: Variance inflation factor
Reading (SF): 24
Exercises: 24.33, 35, 37, 41; Submit Project Installment 3

QUIZ**Session 19: Using categorical variables in regression**

Key Topics: Dummy variable, partial F -test, model profile
Reading (SF): 25.1-4
Exercises: 25.39, 41, 43, 47

Session 20: More categorical predictors

Reading (SF): 25.5

QUIZ**Session 21: Review: building a regression model**

Key Topics: Stepwise regression, data mining
Reading (SF): SIA p. 736

Session 22: Forecasting with regression models

Key Topics: Lagged variable, autoregression, Durbin-Watson, seasonality
Reading (SF): 27.2-3
Exercises: 27.33, 35, 39

Session 23: Final Review Lecture**PROJECT INSTALLMENT 4**

Submit Project Installment 4

FINAL EXAMINATION

Syllabus STAT 621

■ Overview

The course assumes that you are familiar with the material covered in the first half of STAT 613 which is basic probability and inferential statistics. With this as a foundation, the course critically explores the use of the key statistical methodology known as regression analysis for solving business problems. These methods and their application will reappear in many other MBA classes and are part of the basic “tool kit” expected of all MBAs in their careers.

■ Source Material

REQUIRED

- Class Notes. These can be downloaded directly from the STAT 621 Canvas e-room.
- JMP 11 (software), SAS Institute, downloadable from upenn.onthefhub.com
- Stine and Foster, *Statistics for Business*, Addison Wesley.

OPTIONAL (ON RESERVE AT LIPPINCOTT LIBRARY)

- Sall, Creighton, Lehman, *JMP Start Statistics*, 5th edition, SAS Institute.
- Freedman, Pisani and Purves, *Statistics*, 4th edition, Norton.
- Keller, *Statistics for Management and Economics*, 8th edition, South-Western Cengage Learning.

The fundamental material for the class is contained in the Class Notes, which will be discussed and elaborated in the class lectures. The Stine and Foster (SF) textbook elaborates on most (but not all) of the Class Notes. Links to the relevant readings in SF appear throughout the Class Notes. For those who would like further background materials, we recommend Sall, Creighton and Lehman (SHL), Freedman, Pisani and Purves (FPP) and Keller (K). SHL is an example-rich guide to statistical analysis with the statistics package JMP. FPP is a highly verbal and conceptual book — an excellent introduction both for “poets” who are unfamiliar with technical readings and for “quants” who would like a better sense of the reasoning behind statistics. K is in the style of a traditional “reference manual” and explains details and provides many formulas for statistical procedures that are not covered in class.

JMP is the computer package we’ll use extensively for statistical calculations and graphics. In particular, an essential component of STAT 621 will be project work requiring substantial use of JMP. Although JMP is merely a tool and not the central point of the course, it is sufficiently useful that you will need it.

■ Class Preparation

As soon as possible, you should obtain and install JMP. Before each class, you should review the material from the previous class and you should skim the Class Notes that will be covered. This is a course that builds upon itself and it is crucial to not fall behind. The classes focus on critical interpretation of results and analysis of assumptions. We use JMP to carry out the computations, although the software itself is not the main focus of the course.

You should also read the relevant sections of the SF textbook as annotated throughout the Notes and shown in this syllabus. We strongly recommend that you review the exercises that conclude each chapter. The exercises in each chapter of the SF textbook begin with matching, true/false, and conceptual questions. You should routinely skim these exercises in every chapter; they review notation and basic properties of the methods covered in class. In addition, the course outline identifies specific additional “you do it” exercises that require data analysis or computation that is related to examples and topics of lectures. These exercises will not be evaluated but are useful for review.

■ Attendance

Attendance is an important aspect of the Wharton commitment. Wharton students are admitted in part because of the experiences they bring to the community that they can add to class discussions. Without attending, learning as a collaborative process cannot exist. Accordingly, absences are only appropriate in cases of personal emergency. In addition, late arrival is disruptive to the learning environment and promptness is expected. Please make note of the start of the term and the time of deliverables and exams as you make travel plans. In case of illness, we require a letter of confirmation from Student Health Services. If you find yourself in a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Absences due to recruiting are not excused. Employers are prohibited from requiring recruiting-related activities (e.g., interviews, events or travel) that conflict with a student’s academic commitments. An employer’s inflexibility on this issue is a violation of Wharton’s recruiting policies.

■ Exercises, Quizzes and Exam

There will be weekly exercises as indicated in the course syllabus. These exercises will not be collected, but they are essential for the learning process and you should treat them as a requirement. The textbook supplies brief answers to these questions and office hours are available for further questions.

There will be four 10 minute in-class quizzes. Quizzes will take place on Mondays.

There will be a two-hour final exam.

■ Learning Team Project

A project will be assigned to each learning team during the course. It will entail the statistical analysis of data for a business application that your team will describe in two installments.

This project must reflect the work of only your learning team. You are strictly forbidden from discussing this project with anyone outside your learning team.

■ Teaching Assistants (TAs)

TAs for STAT 621 will hold office hours throughout the course. Times and locations will be posted in the 621 Canvas e-room.

■ Classroom Expectations – Concert Rules

- Class starts and ends on time.
- Sit according to the seating chart.
- Late entry or reentry only under exceptional circumstances.
- Name tents displayed.
- Phones, laptops and other electronic devices turned off. We do permit the use of tablets (e.g., an iPad) for taking notes in class.

■ Grading

Grades for the course will be based on the following components

Final Examination	50%
In-class Quizzes (4)	20% (5% each)
Project	25% (10% and 15%)
Concert rules, including attendance	5%

Attendance is mandatory. One unexcused absence is allowed during the quarter without penalty; beyond that, each unexcused absence removes a ½ percentage point from your total grade.

Course Outline STAT 621

KEY

SF refers to Stine and Foster, *Statistics for Business*, Addison Wesley.

Session 1: Course Overview

Key Topics: Review of the key ideas from inferential statistics to be used regression
Reading (SF): Chapters 1-18

Session 2: Fitting lines to data

Key Topics: Slope and intercept, fitted values and residuals, r-squared
Reading (SF): 19
Exercises: 19.39, 41, 43, 47

Session 3: Fitting curves to data

Key Topics: Transformations (logarithm, reciprocal), elasticity
Reading (SF): 20
Exercises: 20.31, 33, 35

Session 4: Simple regression model

Key Topics: Parameters, assumptions, basic diagnostics
Reading (SF): 21.1-2

Session 5: Inference for the Simple Regression Model

Key Topics: Tests, confidence intervals, prediction intervals
Reading (SF): 21.3-4
Exercises: 21.39, 41, 43, 47

Session 6: Remedies for common problems

Key Topics: Nonlinearity, dependence, heteroscedasticity, outliers
Reading (SF): 22
Exercises: 22.37, 39, 45; 4M (p. 572)

Session 7: Multiple regression

Key Topics: Scatterplot matrix, marginal and partial slope, path diagram
Reading (SF): 23.1-2

Session 8: Multiple regression model

Key Topics: R^2 , F -statistic, model profile, diagnostic plots
Reading (SF): 23.3-5
Exercises: 23.39, 41, 43, 47

Session 9: Collinearity in multiple regression

Key Topics: Variance inflation factor
Reading (SF): 24
Exercises: 24.33, 35, 37, 41

Session 10: Using categorical variables in regression

Key Topics: Dummy variable, partial F -test, model profile
Reading (SF): 25.1-4
Exercises: 25.39, 41, 43, 47

Session 11: More categorical predictors

Reading (SF): 25.5

Session 12: Review: building a regression model

Key Topics: Stepwise regression, data mining
Reading (SF): SIA p. 736

FINAL EXAMINATION