Waiver

Information Guide
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Introduction

We have structured the Wharton MBA Program to allow you to make the most of your time at Wharton. For some, this is an opportunity to learn an entirely new skillset while, for others, it is a chance to upgrade and update skills previously learned.

Not Everyone Waives

If you have never taken management courses or if it has been a long time since you studied, it is best to start fresh. When you complete the Waiver Questionnaire through the Pre-Term Registration Form, you can click on the “decline to waive” box for each of the core courses and enroll in the basic Pre-Term accounting, finance, microeconomics, and statistics courses to give yourself a solid foundation for some of the fall core courses. Will taking the entire core hamper your progress? Not at all! We know that you may hear rumors that ALL students waive courses and that you are somehow “behind” if you do not. In fact, nearly 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 2012).

Waiver Statistics for the Class of 2012 (WG’12)

<table>
<thead>
<tr>
<th></th>
<th>ACCT</th>
<th>FNCE</th>
<th>BPUB/ LGST</th>
<th>MGEC</th>
<th>MGMT</th>
<th>MKTG</th>
<th>OPIM</th>
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<td>By Exam</td>
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<tr>
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<td>0</td>
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<tr>
<td>% Waivers Approved</td>
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<td>71%</td>
<td>66%</td>
<td>N/A</td>
<td>72%</td>
<td>70%</td>
<td>66%</td>
</tr>
<tr>
<td>% of Class</td>
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<td>21%</td>
<td>25%</td>
<td>25%</td>
<td>3%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Sometimes Waivers Make Sense

Some of you will have educational or career experience that will make some core courses redundant and you might not be eager to repeat some of them. Therefore, with a few exceptions (communications, ethics, and leadership), you have the opportunity to waive core courses.

The Waiver Information Guide which you are currently using outlines each of the core courses that can be waived and the credentials required for a waiver by credential. We have also provided abridged syllabi which include the topics that will be covered. If all looks familiar, then you should go through the waiver questionnaire as appropriate.
During the Pre-Term registration process, you will be asked to complete a waiver questionnaire. Depending upon your responses, we will recommend that you:

- Submit credentials verifying that you meet the waiver requirements;
- Take the take the class; or
- Take one of the waiver exams offered in August and September. Table 1 below shows application and exam statistics from last year.

**If the system recommended that you waive a particular course by credential**, an application will be made available to you online. You should:

- Fill out the application (you will need to print it out once you have completed it online);
- Add a copy of your transcript, a syllabus, and any other relevant information.
- Mail the completed packet using the envelope included in the back pocket of *Get Started*. You can also submit it to our office when you arrive.

The credential application will be forwarded to the faculty member who heads up that core course.

**If the questionnaire indicated that you should take the waiver exam**, you can register for in on the Pre-Term Waiver Questionnaire. The accompanying *Waiver Exam Guide* provides samples of many of the core exams and, in many cases, solution sets. It will also include a schedule of waiver exam dates.

**Note**: If you are unsure of whether your waiver-by-credential will be approved, you must submit the application by August 8. This guarantees that you will receive a response before the exams begin (you do not want to have to sit for an exam unnecessarily. If your credentials are approved, but you fail the exam, you must take the class). If you are sure that the credentials will be approved, or if you do not intend to take a waiver exam if they are denied, the deadline to submit the application is Wednesday, September 7, 5 p.m.

### Should You Waive?

There are advantages and disadvantages to waiving. Advantages include

- Lightening the course load, which is particularly helpful in the first quarter;
- Making space for more electives, which can be helpful if you have multiple areas of interest; and
- Not enrolling in coursework that will be repetitive.

The disadvantages include

- Fewer courses with your cohort or learning team;
Not taking foundation courses that would better prepare you for advanced courses in the field (credentials can be deceiving if the topics covered on paper were not covered thoroughly in the classroom); and

Filling specific days and times in your academic schedule when the elective offerings you want are not offered at those days and times.

**Waiver Policies**

Here are some policies that you should know about if you hope to waive core courses:

- All core course waivers either by exam or by credential must be completed in the first year of the program.

- If you do not meet the requirements for waiver by credential, you may try to waive the same course by taking the waiver exam in all classes except OPIM631. In that course, you can only take the waiver exam if that is recommended.

- You have only one attempt at each waiver exam. 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 your online waiver questionnaire does not indicate that a waiver-by-credential is appropriate, you cannot submit credentials. The waiver exam would be the next step.

- If you fail the waiver exam, you cannot then attempt to waive the course by credential. From the perspective of the faculty, you have just proven that your knowledge of the subject is not current.

- If you want to waive by credential, you must meet the stated deadlines. If you do not, you may have to enroll in the course or take the waiver exam before you hear about your waiver request.

- If you waive the course, but decide you would rather take it, you may enroll, but must do so in the first year of the program and within a reasonable period after the start of the class.

**What should you do?** First, feel free to contact us. Academic advisors are available to discuss, in depth, what is best for you. Second-year students can also give a perspective on waivers; remember, however, that they don’t know your background or experience. Even if you receive waivers, you can later decide to take the courses. You may decide that it would be good to review everything. You will learn “The Wharton Way,” which is helpful if you expect to take advanced courses. If you have any questions, please don’t hesitate to contact us at mbaprogram@wharton.upenn.edu.
Waiver

Information

- Descriptions
- Syllabi
Financial Accounting (ACCT620/621)

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 objective of the core requirement in financial accounting is to teach the basic concepts, standards, and practices of financial reporting, leading to the ability to read and understand published financial statements.

“Tracks” within Financial Accounting

Students entering the MBA program at Wharton come with diverse backgrounds in financial 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 financial accounting. As a result, we offer two courses with which students can meet the financial accounting requirement: ACCT620 (a full-semester, 1 credit unit course) and ACCT621 (a half-semester, 0.5 credit unit course). The difference between the two is the material covered and the amount of time allotted to each topic. For example, ACCT 620 reviews basic accounting transactions, debits and credits, and income statement and balance sheet preparation, while ACCT 621 does not. Students have three options for fulfilling their financial accounting requirement. They can:

1. Waive financial accounting altogether, either by credential or exam.
2. Place into the accelerated course (ACCT621) either by credential or exam. Students in ACCT621 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 the full-semester course (ACCT620).

Please read the next section to decide which option is appropriate for your situation.
The Financial Accounting Waiver and Placement Process

WAIVING OR PLACING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide.

Waiving the Financial Accounting Core Requirement By Credentials

Waiver of the financial 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 financial 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 two years.

Placing into ACCT621 by Credential

Placement into ACCT621 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 ACCT621 without the exam is allowed only for (1) individuals who have taken introductory AND intermediate financial accounting with a grade of B or better in both or (2) Wharton undergraduates who received a grade of B or better in Accounting 101 within the prior five years. In these cases, placement into ACCT621 is conditional on the student taking ACCT604 in Pre-Term. That is, students placing into ACCT621 by credential are required to take ACCT604 in Pre-Term.

Documenting Your Credentials

Students interested either in placing into ACCT621 by credentials or in waiving the financial accounting core requirement by credentials should formally apply to the Wharton MBA Program Office by filling out and submitting the placement or waiver form.

- Persons holding professional certification (CPA, CA, or CFA) 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.

Please Note: Students who are unsure whether they can waive or place can take both exams since they are given at different times.

A common misinterpretation of the waiver by credential criteria is that students must know accounting at the CPA level in order to waive the financial 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 ACCT621. 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 exams in Financial Accounting will be offered in August. Except as noted above, a student can waive the financial accounting core requirement or be placed into ACCT621 only by taking the appropriate exam. The Waiver Exam is designed for those students who, at the end of Pre-Term, wish to waive the entire financial accounting core requirement. Students with extensive work experience or prior coursework in accounting are encouraged to take this exam. The Placement Exam is designed for those students who, at the end of the Pre-Term, wish to place into the half-semester course, ACCT621. Students with some work experience or coursework in accounting are encouraged to sit for this exam.

The Waiver and Placement Exams select from topics covered throughout ACCT620 and 621. The exams will be “closed-book,” “closed-notes,” and similar in form and content to past ACCT620 and ACCT621 exams. Copies of past ACCT exams are included in the Waiver Exam Guide.

Exam Preparation
The following are the accounting courses offered during Pre-Term that help you prepare for the waiver and placement exams, as well as the fall semester.

**Accounting 608: Waiver Preparation Course**
Upon completion of this review course, the student should be prepared to take the Waiver Exam. This course will meet for approximately ten hours during the August 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 ACCT608 has previously studied all of the topics covered in ACCT620. Therefore, the course will review the material in ACCT620, emphasizing the financial statement analysis implications of the topics.

**Accounting 604: Financial Accounting Placement Preparation Course**
Upon completion of this course, the student should be prepared to take the Placement Exam. This course will meet for approximately ten hours during the August 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 or work with financial statements, but who have been unable to place by credentials into the half-semester financial accounting course, ACCT621. In addition, students who have placed into ACCT621 by credentials are also strongly advised to take this course because the knowledge of all material covered in this course will be presumed in ACCT621. ACCT604 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.
**Accounting 603: Financial Accounting Review Course**

The material covered in this course is required for all students taking the full-semester version of financial accounting (ACCT620). See the *Get Started* mailing for details.

This chart may help you decide which Pre-Term course may be appropriate for you:

<table>
<thead>
<tr>
<th>IF YOU HAVE:</th>
<th>NO Previous Accounting Experience</th>
<th>Previous Accounting Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taken NO Previous Financial Accounting Courses</td>
<td>Take ACCT603</td>
<td>Take ACCT603 and 604 in Pre-Term</td>
</tr>
<tr>
<td>Taken ONE Previous Financial Accounting Course</td>
<td>Take ACCT604 in Pre-Term</td>
<td>Take ACCT604 or 608 in Pre-Term</td>
</tr>
<tr>
<td>Taken MORE THAN ONE Previous Financial Accounting Course</td>
<td>Take ACCT608 in Pre-Term</td>
<td>Take ACCT608 in Pre-Term</td>
</tr>
</tbody>
</table>
Syllabus ACCT620

Stanley Baiman  
Sections: 007-009  
Office: 1321 SH-DH  
Tel: 215-898-6782  
Email: baiman@wharton.upenn.edu

Luzi Hail  
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Gus De Franco  
Sections: 004 - 006  
Office: 1310 SH-DH  
Tel: 215-898-7772  
Email: defranco@wharton.upenn.edu

Office Hours: Monday/Wednesday 3:15 – 4:30 p.m. and by appointment  
Website: http://webcafe.wharton.upenn.edu

Overview

The course objective is to provide prospective users of financial information an understanding of financial accounting fundamentals. The course focuses on developing the technical skills needed to apply accounting procedures and rules so as to develop an understanding of how economic events are recorded in the financial statements. In addition, it focuses on interpreting financial statements. This course also emphasizes how judgment and choice among different accounting methods, as well as accounting regulation, can influence the reported numbers. While some understanding of the preparers’ perspective is necessary, this course focuses on the users’ perspective.

Course Material

HOMEWORK ASSIGNMENTS AND CASES

These materials are available on the course website, in the “Course-Wide Materials” folder on the desktop.

REQUIRED TEXTBOOKS

Dyckman, Magee and Pfeiffer, Financial Accounting, Cambridge Business Publishers, (3rd edition). Referred to as DMP in the syllabus. In the class schedule below, you will find practice problems from the textbook assigned to reinforce the material covered on each topic. Solutions to all of the problems in the Dyckman et al. book are included in the Course-Wide folder in the class website.

CLASS NOTES

The class notes for the course are common across all instructors. They are available within the Course-Wide Materials folder on the desktop of the course website. They are also in a bulk pack which is available from Study.net.
EXAM PRACTICE PROBLEMS AND SOLUTIONS

Previous exams and solutions are available for downloading from the course website, in the Exam Practice Questions folder within the Course-Wide Materials folder.

ADDITIONAL PROBLEMS AND SOLUTIONS

Additional problems and solutions are available for downloading from the course website, in the Additional Problems folder within the Course-Wide Materials folder.

ARTICLES

Articles are sometimes referenced in your course syllabus and class notes. These are from the business press and provide context for issues which will be discussed in class. They are available in the Articles folder within the Course-Wide Materials folder of the class website.
Course Outline ACCT620

KEY
DMP refers to the Dyckman et al. textbook (3rd edition).
DMP x-y means problem y in chapter x of the DMP textbook

All of the topics listed below will be covered.

Session 1. Introduction
Class Notes: Class Notes #1
DMP Reading: Chapter 1, including Appendix 1A
DMP Problems: E1-27, P1-35, P1-41
Add. Reading: A Tower of Babel in Accounting

Session 2. Mapping Business Activity into Financial Statements; Links Among Financial Statements
Class Notes: Class Notes #2
Case #1: Animatronics (Q1 – Q4)
DMP Reading: Chapters 2, 3
DMP Problems: Chapter 2: M2-14, M2-18, M2-19, M2-20, M2-25, M2-29, E2-35, E2-45
Chapter 3: P3-40, P3-41, P3-42, P3-43, P3-47, P3-48, P3-49, P3-51, P3-45, C3-55

Session 3. Economics vs. Accounting; Introduce Revenue Recognition
Class Notes: Class Notes #3
DMP Reading: Ch. 2, p.38-42, 47-48; Ch 9, p. 389-400

Session 4. Revenue Recognition; Accrual Accounting and the Matching Principle
Class Notes: Class Notes #4
Case # 2: United Frequent Flyer Program
DMP Reading: Chapter 6, p. 257-266
DMP Problems: E6-28
Add. Reading: Accounting Shift to Lift
Demystify Lehman’s Shell Game
Session 5. Statement of Cash Flows
Class Notes: Class Notes #5
Case # 1: Animatronics (Q5)
DMP Reading: Chapter 4, Including Appendix 4A
DMP Problems: M4-25, M4-27, M4-29, E4-34, E4-36, E4-37, E4-39, E4-42, E4-43, P4-45, P4-47, P4-49

Session 6. Statement of Cash Flows (continued)
Class Notes: Class Notes #6
Case # 3: Callaway Golf
DMP Reading: Chapter 4
DMP Problems: M4-26, E4-35, P4-46, P4-48, P4-50, P4-51, P4-52
Add. Reading: WSJ – Cash Flow Lies

Session 7. Introduction to Financial Statement Analysis (FSA)
Class Notes: Class Notes #7
DMP Reading: Chapter 5
DMP Problems: M5-22, M5-23, E5-26, E5-29, E5-33

Session 8. Accounts Receivable
Class Notes: Class Notes #8
Case # 4: Carter’s Inc.
DMP Reading: Chapter 6, p 266-278, Appendix 6A
DMP Problems: M6-18, M6-19, M6-20, M6-23, E6-33, E6-34, E6-35, E6-38, E6-37, C6-49
Add. Reading: Demystify Lehman’s Shell Game

HOMEWORK #1 due at 5 p.m. on the day after Session 8.

Session 9. Inventory and Cost of Goods Sold
Class Notes: Class Notes #9 & 10 pages 1-8
Case # 5: Amazon.com
DMP Reading: Chapter 7, including Appendix 7A
DMP Problems: M7-15, M7-19, M7-21, M7-23, E7-26, E7-27, E7-28
Add. Reading: Big Oil’s Accounting,
Costly Inventory Lesson
Session 10. Inventory and Cost of Goods Sold (continued)

Class Notes: Class Notes #9 & 10 pages 9-end
Case # 6: Snap-On Tools
DMP Reading: Chapter 7
DMP Problems: E7-29, E7-30, E7-31, P7-34, P7-35, C7-37, C7-38
Add. Reading: Letter to Select Committees,
3_24_09 Blue Dogs

Session 11. Long-Lived Assets

Class Notes: Class Notes #11 & 12 pages 1–11
DMP Reading: Chapter 8

HOMEWORK #2 due at 5 p.m. two days after Session 11.

Session 12. Long-Lived Assets (continued)

Class Notes: Class Notes #11 & 12 pages 11–end
Case # 7: Snap-On Tools
DMP Reading: Chapter 8
Add. Reading: Wachovia Reports

HOMEWORK #3 due at 5 p.m. on the day after Session 12.

Session 13. Long-Term Debt

Class Notes: Class Notes #13 & 15 pages 1-12
DMP Reading: Chapter 9, Appendix A

Covers sessions #1 - #12, inclusive. Note session 13 material is not covered on the Midterm.

Session 15. Long-Term Debt (continued)

Class Notes: Class Notes #13 & 15 pages 12-end
Case # 8: Carter’s Inc.
DMP Problems: C9-62, C9-63
Add. Reading: Morgan Stanley to Post a Loss,
Citigroup Finds a Profit
**Session 16. Leases**

Class Notes: Class Notes #16 & 17 pages 1-10  
DMP Reading: Ch. 10, p. 435 - 445  
DMP Problems: M10-12, M10-13, E10-23, E10-24  
Add. Reading: New Accounting Rules Ruffle the Leasing Market

HOMEWORK #4 due at 5 p.m. two days after Session 16.

**Session 17. Leases (continued)**

Class Notes: Class Notes #16 & 17 pages 11-end  
Case # 9: Safeway  
Add. Reading: CFO Lease Article

**Session 18: Accounting for Taxes**

Class Notes: Class Notes #18 & 19 pages 1-11  
DMP Reading: Chapter 10, p. 456 - 463  

HOMEWORK #5 due at 5 p.m. on the day after Session 18.

**Session 19. Accounting for Taxes (continued)**

Class Notes: Class Notes #18 & 19 pages 11-end  
Case # 10: Safeway  
DMP Problems: C10-48  
Add. Reading: GM Loses 39 Billion, Lifting the Veil

**Session 20. Stockholders’ Equity**

Class Notes: Class Notes #20  
Case #11: Pepsico  
DMP Reading: Chapter 11, including Appendix 11A  

HOMEWORK #6 due at 5 p.m. on the day of Session 20.
Session 21. Marketable Securities
Class Notes: Class Notes #21 & 22 pages 1-11
DMP Reading: Chapter 12, including Appendix 12A and 12B
DMP Problems: M12-11, M12-12, M12-13, M12-21, E12-24, E12-29
Add. Reading: Are the Bean Counters to Blame?
Banks Face Mark-To-Market Challenge
Confronting High Risks and Banks

HOMEWORK #7 due at 5 p.m. on the day after Session 21.

Session 22. Marketable Securities and Other Investments
Class Notes: Class Notes #21 & 22 pages 12-end
Case # 12: Peet’s Coffee
DMP Reading: Chapter 12, including Appendices 12A and 12B

Session 23. Pensions and Other Post-Retirement Benefits
Class Notes: Class Notes #23
DMP Reading: Ch. 10, p. 446 - 455
DMP Problems: M10-12, M10-13, E10-23, E10-24
Case # 13: Johnson & Johnson

Session 24. Conclusion and Review

HOMEWORK #8 due at 5 p.m. two days after Session 24.

FINAL EXAM
Covers sessions #13 - #24, inclusive.
**Syllabus ACCT621**

<table>
<thead>
<tr>
<th>Peggy Bishop Lane</th>
<th>320 JMHH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tel:</strong> 215-898-8601</td>
<td><strong>Fax:</strong> 215-898-0425</td>
</tr>
<tr>
<td><strong>Email:</strong> <a href="mailto:pblane@wharton.upenn.edu">pblane@wharton.upenn.edu</a></td>
<td><strong>Office hours:</strong> 3:30-5:00 Tuesdays and Thursdays in 320 JMHH (or by appointment)</td>
</tr>
</tbody>
</table>

### Overview

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 621 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.
Course Material

RECOMMENDED TEXTBOOK  *(Available at the Penn Bookstore)*


COURSE PACKET

There are two sections of the Course Pack (a.k.a. “bulk pack”). Both are available on the webCafé (in part) and Study.net. Note that any copyrighted materials will only be available on Study.net. (CP)

- **Problems section (Required):** This section includes problems to be discussed in class, additional practice
- **Notes section (Optional/Recommended):** This section includes an outline, condensed notes, and additional readings for each topic.

COURSE HANDOUTS

Consist of supplemental lecture material and solutions to cases. Most of this material will also be available on the course webCafé.

COURSE WEBCAFÉ

http://webcafe.wharton.upenn.edu

Log into the course webCafé with your Wharton username and password. The site includes lecture slides, most course handouts, course information, important announcements, on-line homework, and interesting links.
Course Outline ACCT621

**KEY**

DMP = Dyckman and Pfeiffer, 3rd Edition  
CP = Course Packet, “Problems” Section  
Case Discussions in **bold** can be turned in for a grade.

### Session 1. Statement of Cash Flows
- **DMP Reading:** Chapter 4  
- **DMP Problems:** M4-28, E4-37, E4-40, P4-50, P4-51.  
- **CP Problems:** Hank’s Hang Gliders, Tiffany & Co.

**ON-LINE HOMEWORK:** Submitted before class (Revenue Recognition and A/R)

### Session 2. Revenue Recognition and Accounts Receivable
- **DMP Reading:** Chapter 6  
- **DMP Problem(s):** M6-18, M6-22, E6-27, E6-33, E6-34, E6-35, E6-37, C6-48.  
- **Articles:** SAB 101  
- **CP Problem(s):** DHC Corp., Larcker Liquor, Cisco Systems

### Session 3. Revenue Recognition and Accounts Receivable
- **Article:** Microstrategy  
- **CP Problem:** Cisco Systems, if needed  
- **Case Discussion:** Biovail Corporation

**ON-LINE HOMEWORK:** Submitted before class (Inventory and Intangibles)

### Session 4. Inventory Valuation
- **DMP Reading:** Chapter 7, Appendix 7A  
- **DMP Problem(s):** Q7-4, M7-19, E7-26, E7-28, E7-30, P7-36.  
- **CP Problem(s):** Famous Horse, ICF, Inc., Steelcase  
- **Articles:** Big Oil’s Accounting

### Session 5. Inventory and Intangible Assets
- **DMP Reading:** Chapter 8 (pp. 364-370), Chapter 12 (pp. 557-560)  
- **DMP Problem(s):** MC8-6, Q8-8, E8-31, P8-37, E12-41, P12-46  
- **CP Problem(s):** MoneyGram  
- **Case Discussion:** Merrimack Tractors and Mowers, Inc.
Session 6. Intangible Assets (continued)
Case Discussion: eBay, Inc.

Session 6. Long-Term Debt
DMP Reading: Chapter 9; Appendix A (pp. 592-597)
CP Problem(s): Munson Grocery

Midterm Review Session

Midterm Exam (covers sessions 1-6, up to and including “Intangible Assets”)

Session 7. Long-Term Debt (continued)
CP Problems: LTD, Inc., B&G Foods

Session 7. Leases
DMP Reading: Chapter 10 (pp. 434 – 446)

ON-LINE HOMEWORK: Submitted before class (Leases and Taxes)

Session 8. Leases (continued)
CP Problem(s): Bay State Delivery, Wal-mart

Session 9. Leases (continued)
Case Discussion: Leasing Computers at Persistent Learning

Session 9. Accounting for Taxes
DMP Reading: Chapter 10 (pp. 456 – 463)
CP Problem(s): DT, Inc.

ON-LINE HOMEWORK: Submitted before class (Stock Options & MS)

Session 10. Accounting for Taxes (continued)
CP Problem(s): Caterpillar

Session 10. Stock Options
DMP Reading: Appendix 11A (pp. 508-512); Review of Chapter 11 if necessary
DMP Problem(s): M11-35, P11-59, C11-64.
Articles: Lack of Rigid Rules, Ex-Brocade Chief Convicted
CP Problem(s): Coca-Cola

Session 11. Marketable Securities and Investments
DMP Reading: Chapter 12 (pp. 536–553), Appendix 12A
DMP Problem(s): M12-12, E12-25, P12-44.
CP Problem(s): Lincoln Park Bank, The Buckle
Session 12. Marketable Securities and Investments (continued)

CP Problem(s): P&G, Coca-Cola
Case Discussion: State Street Corporation

Final Exam Review

Final Exam (Covers sessions 6-12, beginning with “Long-term Debt”)
Managerial Accounting (ACCT622)

Course Description

This course emphasizes the use of accounting information for *internal* planning and control purposes. This orientation contrasts with financial accounting where the focus is on accounting disclosures for parties *external* to the firm.

The course is intended as an introduction for individuals who will make business decisions and evaluate the performance of managers and business units using data obtained from the accounting system.

The course will cover the vocabulary and mechanics of cost accounting, basic issues involved in the design of a managerial accounting system, and the role of management accounting in decisions concerning resource allocation and performance evaluation.

Throughout the course, we will pay particular attention to various (unintended) dysfunctional consequences of traditional managerial accounting systems, as well as possible solutions to these problems.

The Managerial Accounting Waiver Process

WAIVING BY CREDENTIALES

*DEADLINE: See Introduction to this Waiver Guide. A sample exam and solution set can be found in the Waiver Exam Guide.*

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

- Individuals holding professional certification in accounting, such as certified public accountants (CPAs), chartered accountants (CAs), or certified management accountants (CMAs).

  **OR**

- Individuals who have completed one undergraduate course in management or cost accounting with a grade of B+.

  **OR**

- Individuals who have completed two undergraduate courses in management or cost accounting with a grade of B. (Please note that this criterion is strictly interpreted and excludes courses in financial accounting, finance, and economics, as well as courses taken in training programs offered by industrial and/or financial firms.)

Applicants can save themselves and the waiver advisors much time and effort if they do not apply for the waiver by credentials when they do not meet one of the above criteria. Students in the gray area will be asked to take the waiver exam.
Documenting Your Credentials
Persons holding professional certification need only submit a copy of their certificate. Students desiring to waive based on course work must submit a copy of their college transcripts with some notation as to which courses are cost/managerial accounting courses. Additional required information includes a copy of the course syllabus, including the name of the textbook used, and copies of course examinations. Catalog descriptions alone are insufficient for evaluation of course content.

WAIVING BY EXAM

EXAM DATE: See Waiver and Placement Exam Schedule in the Waiver Exam Guide.

The Accounting Department uses a standardized waiver examination, copies of which are not available for inspection. The exam is open-book and open-note and in form and content will be similar to the attached final exams (and solutions) from the ACCT622 course. The topics covered by the waiver exam are similar to those discussed in the ACCT622 syllabus included in the waiver packet.

The waiver exam is given in August. It is designed for those students who were not waived by credential, but who wish to attempt to waive the managerial accounting requirement through examination. Those students who have some background in cost or managerial accounting are strongly encouraged to review the material and sit for the exam.
Syllabus

INSTRUCTOR
Christopher Ittner  1326 SH-DH
Tel: 215-898-7786  Email: ittner@wharton.upenn.edu
Office Hours: Monday and Wednesday 3:15 – 4:15 p.m. or by appointment

The teaching assistants and hours will be posted on webCafé.

Overview
See Course Description on page 27.

Format
The course will be a combination of lecture (with solutions to selected problems), case work, and interactive class discussion. I will assume that you have prepared the required material for each class.

Required Materials
Bulk packet of class notes, readings, and cases (available from Study.net). The bulk packet is designated as BP in the course schedule. Class notes are designated as CN in the course schedule.

Any additional materials handed out in class will be applied to your bursar bill at the end of the term.

Optional Materials
The textbook for this course is:


This text is designated as TEXT in the course schedule. The purchase of this text is optional. If you do not purchase the text, it would be useful to have access to another cost or managerial accounting textbook that covers the same material.
Course Outline

**Session 1: Introduction and Cost Concepts**

**Major objectives:** Introduce important cost terms and concepts. Define and illustrate cost objects, direct costs, and indirect (or overhead) costs. Understand the associations between cost drivers, variable costs, and fixed costs, and the major assumptions underlying the definitions of variable and fixed costs. Review the concepts of contribution margin and cost-volume-profit analysis.

- **Class Notes:** Session 1
- **Bulk Pack:** Cost Concepts, Terms, and Classifications
- **TEXT** (optional): Chapters 2, 3, and 10

**Session 2: Cost Concepts (continued)**

**Major objectives:** Understand the computation of breakeven point and the notion of relevant costs. Apply these concepts to a legal dispute between two contractual parties.

- **Required Case (BP):** Forrest Gump
- **Class Notes:** Session 2
- **Bulk Pack:** Relevant Costs in Nonroutine Decisions
- **TEXT** (optional): Chapters 11 and 12

**Session 3: Product Costing**

**Major Objectives:** Describe the mechanics of cost accounting systems. Define cost allocation and overhead rates. Understand costing methods using actual, normal, and standard costing.

- **Class Notes:** Session 3
- **Bulk Pack:** Product costing example
- **TEXT** (optional): Chapter 4

**Session 4: Burden Rates, Cost Behavior, and Outsourcing Decisions**

**Major objectives:** Apply the concepts covered in the first three sessions to an actual decision. Refine understanding of cost behavior, relevant costs, and cost accounting system output. Understand the limitations of “full costs” and traditional cost accounting systems in decision-making.

- **Required Case (BP):** Bridgeton Industries — Case Assignment due

**Session 5: Cost Allocation and Activity-Based Costing**

**Major Objectives:** Review the purposes and process of overhead cost allocation. Understand the differences between traditional cost systems and Activity-Based Costing (ABC). Apply ABC concepts in an actual decision-making context to understand the effect of cost accounting methods on perceived product profitability, and the use of ABC data in operational and marketing decisions.

- **Required Case (BP):** Destin Brass — Case Assignment due
- **Class Notes:** Session 5
- **Bulk Pack:** Activity-Based Costing example
- **TEXT** (optional): Activity-Based Cost Systems for Manu. Expenses
- **TEXT** (optional): Chapter 5
Session 6: Customer Profitability Analysis

Major Objectives: Understand the inability of most accounting systems to provide useful data for marketing or sales decisions. Examine the use of Activity-Based Costing for determining customer profitability. Discuss the application of customer profitability data to operational, marketing, and strategic decisions.

Required Case (BP): Kanthal (A) ← Case Assignment due
Class Notes: Session 6
Customer-Driven Costs Using Activity-Based Costing

Session 7: Comprehensive Problem Set

Major Objectives: Turn in and review a problem set.

Required Problems: Problem Set (Due by 10:00 a.m. in the Accounting Suite)

Session 8: Common Cost Allocation and Transfer Pricing

Major Objectives: Review stand-alone and ability-to-bear methods for allocating common costs. Discuss transfer pricing methods and their implications for decision-making and performance evaluation.

Required Case (BP): Shuman Automobiles ← Case Assignment
Class Notes: Session 8
Bulk Pack: Transfer pricing
Example of General Rule of Transfer Pricing
TEXT (optional): Chapters 15 and 22

Session 9: Budgets, Standard Costing, and Variance Analysis

Major Objectives: Introduce flexible budgets and standard costs as aids for planning and control. Understand the use of standards for variable costs. Learn how variances between actual and standard costs can be broken into price and efficiency variances to assist in assigning responsibility and examining the variances' causes.

Class Notes: Session 9
Bulk Pack: Readings on Variance Analysis
Session 10: Performance Evaluation Using Accounting Measures

Major Objectives: Understand the advantages and disadvantages of various types of accounting-based performance measures. Discuss how and when these measures lead to dysfunctional outcomes for the firm. Introduce the concept of economic-valued added (EVA) measures.

Required Case (BP): Barrows <— Case Assignment due
Class Notes: Session 10 – to be distributed in class
Bulk Pack: Dierks and Patel, “What is EVA …”
Andersen et al. “EVA Adjustments …”
Performance Measurement (B)
TEXT (optional): Chapter 23

Session 11: Non-Financial Performance Measures and the Balanced Scorecard

Major Objectives: Evaluate the use of non-financial performance measures such as employee and customer satisfaction for decision-making and control purposes. Introduce the balanced scorecard concept, and the use of “causal” business models in performance measurement.

Required Case (BP): Citibank <— Case Assignment due
Class Notes: Session 11
Bulk Pack: Kaplan and Norton, “Linking the Balanced Scorecard to Strategy.”
TEXT (optional): Chapter 13

Session 12: Course Conclusion and Final Review

Major Objective: Summarize and review for final.

FINAL EXAMINATION
The Governmental and Legal Environment of Business (BPUB621/LGST621)

Course Description

This course provides students with a basic understanding of how the law and the political process affect business strategy and decision making. Topics include how market infrastructure (contracts, intellectual property, product liability law) affect business strategy, and how businesses deal with challenges involving interest groups, government agencies or legislation. The course presents broadly applicable frameworks that will help students to manage and advise clients more effectively in a world heavily influenced by legal concerns and governmental forces.

Waiver and Placement Process

The waiver requirements and process for this course are complex because of the course’s interdisciplinary nature. Students may not waive this course unless they can demonstrate sufficient exposure to both the legal and public policy content of the course. Any coursework upon which the waiver request is based must indicate on the transcript the grades specified below (or equivalent) and must have been completed no longer than five years ago. As detailed below, relevant work experience may serve to supplement academic coursework. Students must document the relevance and depth of their work experience. To prepare a waiver application, students should review the course syllabus (below) to see the specific content covered. There is no waiver-by-examination for BPUB/LGST 621.

WAIVING AND PLACING BY CREDENTIALS

DEADLINE: See the Introduction to this Waiver Guide.

Please note: Deadlines for waiver consideration will be strictly enforced. Even if you do not have all of your supporting documentation available, you must still begin the process by filing the basic application in a timely fashion.

Applications for waiver by credentials will be reviewed by both LGST and BPUB; however, it is only necessary to submit a single waiver application to the Wharton MBA Program Office. A full waiver of BPUB621/LGST621 requires meeting both BPUB and LGST requirements.

Legal Studies Requirements

The following credentials are necessary to meet the LGST requirement:

- Students must have a law degree OR
- Students must be enrolled in Penn’s JD-MBA Program (conditional upon eventual successful completion of that program).
- Students who have completed at least four undergraduate law courses or two graduate-level law school courses may also meet LGST requirements, particularly if that coursework relates
to the legal environment of business and is coupled with significant relevant professional experience. The majority of such coursework must have been completed with a grade of A- or above (or its equivalent). Such cases will be decided on an individual basis by the Legal Studies Department.

**Business and Public Policy Requirements**

A waiver of the Business and Public Policy portion of the core course requires both relevant work experience and coursework:

- Students must have completed at least one masters-level course in public policy, economics, or political science that examines how the political process formulates legislation and regulations affecting business. Such a course (1) must have been completed with a grade of A or above, and (2) must be documented with a detailed syllabus in the waiver application, and (3) explicitly involve analysis of the political process through the lens of firm strategy. As such, a degree in political science is not, by itself, sufficient coursework as it typically does not address understanding the political landscape through the lens of firm strategy; and

- Students must have substantial high-level work experience in a position involving the intersection of politics and firm strategy

**Placing by Credential**

Students who meet the Business and Public Policy, but not the Legal Studies requirements must substitute a Legal Studies elective. Students who meet the Legal Studies, but not the Business and Public Policy requirements, can take the public policy half of BPUB/LGST 621 with their cohort, registering for the course as an independent study.

**Documenting Your Credentials**

In addition to a copy of your transcript(s) showing relevant courses taken, please submit syllabi for the most closely related courses and any other supporting material, including information about relevant work experience.

**Waiver by Exam**

BPUB/LGST621 cannot be waived by examination.
Syllabus

Professor Kevin Werbach
Tel: 215-898-1222
Email: werbach@wharton.upenn.edu

Professor Justin Wolfers
Tel: 215-898-3013
Email: jwolfers@wharton.upenn.edu

Professor Dan Hunter
Tel: 215-573-7154
Email: hunterd@wharton.upenn.edu

Professor Betsey Stevenson
Tel: 215-898-3019
Email: betseys@wharton.upenn.edu

Class website: http://webcafe.wharton.upenn.edu (click through to BPUB/LGST 621)

Readings

Required readings are available as follows:


- A coursepack with selected readings and cases is available at Wharton Reprographics. (See list below.) Note: Be sure to get the appropriate bulk pack for your professors.

Additional readings may be downloaded from webCafé, or will be made available as handouts in class.

Lecture Materials, in the form of power-point slides, should be available after each class on webCafé.

COURSEPACK READER INVENTORY LIST

1. This inventory list (2 pages)
2. BPUB/LGST 621 Course Overview (3 pages)
3. BPUB/LGST 621 Course Outline (4 pages)
4. BPUB/LGST 621 Session Summaries (1 page)
7. Shell, G.R., “A Comment on Business Strategy and Litigation” (3 pages)
8. Baron, pp. 388-9 and 400-16 (19 pages)
9. California Space Heaters case (3 pages)
13. The Staples-Office Depot Merger? case (5 pages)
14. Mallor, Business Law and Regulatory Environment, pp. 74-84 (11 pages)
15. Shell, G.R., “Basic Elements of Business Fraud” (4 pages)
16. Krehbiel, Keith, “Interest Group Analysis for Managers” (11 pages)
18. Sophis Networks case (9 pages)
19. Note on AIDS and the Pharmaceutical Industry (13 pages)
20. GlaxoSmithKline and AIDS Drugs Policy case (12 pages)
Course Outline

Part I

Readings are all in the coursepack; case preparation questions are available from both the coursepack and webCafé. NOTE: A separate syllabus and coursepack will be available for the BPUB half of the course.

Session 1: Litigation and Law
Read: Shell, “The Strategist’s Dream”
Bodily, “When Should You Go to Court?”
Shell, “A Comment on Business Strategy and Litigation”

Session 2: Tort Rules
Read: Baron, “Law and Markets”

Session 3: Contract Rules
Read: Readings on Contract Law

Session 4: Property Rules
Read: Mallor, “Intellectual Property and Unfair Competition”

Session 5: Trade Regulation
Read: Yao, “A Note on Antitrust and Competitive Tactics”

Session 6: Individual Responsibility
Read: Mallor, “Securities Regulation”
Shell, “Basic Elements of Business Fraud”

Part II

This note itemizes the readings, assignments, and topics for each lecture in the second half of BPUB-LGST 621. All required materials are in the coursepack, and may be supplemented with further articles to be posted on WebCafé. Beyond the readings, you should prepare the assigned case (noted below) for each class, using the Case Preparation Questions documents.

A. MANAGING PUBLIC CHALLENGES

Session 7. Business and the Media: GM/Dateline
Read: “A Roadmap”
Session 7 notes: “Business and the Media”

Session 8. Business and Activists: Brent Spar
Read: Session 8 notes: “Business and Activists”
B. MAKING THE RULES: BUSINESS STRATEGY AND GOVERNMENT INSTITUTIONS

Session 9. Business Political Competition

Read: Session 9 notes: “Business Political Competition”

Note: An example of a distributive politics analysis, for Boeing (from Baron), is in the bulkpack, but is not required reading.

Session 10. Formulating Political Strategy

Read: Session 10 notes: “Formulating Political Strategy”
Fiorina and Peterson, “The Congress in Operation”

Note: The Fiorina and Peterson reading can be skimmed by those with a strong background in U.S. politics, but international students and non-specialists should read it closely.

Optional reading: Ansolabehere, de Figueiredo and Snyder, “Why is There so Little Money in U.S. Politics?”

Session 11. Integrated Strategy in the European Union

Read: Session 11 notes, “Integrated Strategy”
Session 11 supplement, “The European Union”

Corporate Finance (FNCE601/621)

Course Description

Given the fact that students entering the MBA program at Wharton have different backgrounds in finance, we divide the first-year students into three groups.

Group A: The first group consists of those students whose formal coursework and/or work experience is equivalent to two full-semester courses in intermediate corporate finance taught at the level of the textbook by Brealey, Myers, and Allen, which is used in FNCE601 and FNCE621 as described below. These students can fulfill the core requirement in corporate finance by one of two methods: by credentials or by taking the Waiver Exam. These two methods are described in the “Corporate Finance Waiver Process” section below.

Group B: The second and main group is composed of those students with little or no training or experience in corporate finance. The majority (65%) of students will end up in this group. These students have to fulfill the core requirement in finance by taking the full-semester course in corporate finance (FNCE601). Although this course will review all the necessary economics and statistics concepts in class, some standard courses from the MBA sequence should be taken concurrently.

Group C: The third group and final group contains those students with moderate experience in finance. Approximately 25% of students end up in this group. These students fulfill the core finance requirement by taking the half-semester accelerated course in corporate finance (FNCE621). In order to qualify for this course, they must either pass the FNCE 621 placement exam or demonstrate sufficient credentials to waive the entire core.

The Corporate Finance Waiver Process (FNCE601)

As mentioned above, there are two methods for placing out of the core requirement in corporate finance and joining group A. These two methods are described below.

Before doing so, however, we want to emphasize the fact that the corporate finance waiver process is a serious process, in which we, in conjunction with the students, try to identify the best alternative for each student. In particular, we seek to avoid situations where a student is unable to perform adequately in elective finance courses because of a lack of basic training, or has difficulty answering standard corporate finance questions during his/her interviews for summer internships. It is therefore important that students, including those who have waived the core course in corporate finance, make sure upon their arrival at Wharton that they have been classified in the appropriate group.
WAIVING CORPORATE FINANCE (FNCE601) BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide

For some students, a waiver for the core requirement in corporate finance can be granted on the basis of credentials. However, this is only possible in cases where there is no doubt about the student’s background in corporate finance. As a result, the only students who will be granted a waiver will be those who satisfy the following requirements:

Individuals who, in the last five years, have completed at least two courses in finance or financial economics, with a grade of B or better, at a university with sufficiently high academic standards as judged by the instructor. If the two classes fall slightly outside the five year limit, a waiver may be granted if the student has worked in finance continuously since graduation. In such a case, details of work experience should be submitted with the waiver application. To be clear, work experience alone is not sufficient to grant a waiver; the two courses remain necessary. Work experience can only help in providing slight flexibility with the five year limit. These courses must be equivalent to semester-long courses in intermediate corporate finance taught at the level of the textbook by Brealey, Myers, and Allen. In particular, the courses should have covered the following topics, which essentially correspond to the first 22 chapters in the 9th edition of the textbook by Brealey, Myers, and Allen, with the exception of chapters 12-14:

- discounting methods and present value calculations;
- capital budgeting;
- bond and stock valuations;
- the capital asset pricing model;
- market efficiency;
- capital structure;
- option pricing.

Courses taken as part of training for a finance-related position, as well as the CFA exams, will not be considered for these requirements, as these courses/exams tend to lack the depth and rigor that is necessary in preparation for the elective courses in finance at Wharton. Also, please take note that the finance courses offered by some academic institutions often do not reach the depth that is required to do well in the Wharton MBA program. As a result, waiving by credentials will not be possible for those students whose academic backgrounds in finance are deemed insufficient by the instructors in the core courses. Those students will instead be encouraged to take the Waiver Exam described below.

Applicants for waiving the corporate finance core course requirement by credentials must begin by filling out appropriate waiver section of the Pre-Term Registration form. The deadline for a waiver-by-credential is the day before fall term classes begin.
Along with the Waiver by Credentials Form, students are required to send the following material in order to waive the core requirement in corporate finance:

- Course descriptions (i.e., syllabi) from previous courses in finance. If not included in the syllabi, the reading list for these courses should also be included.
- Transcript(s) with specific designation of grades and courses submitted. Please highlight relevant courses on your transcript. Grades of B or better are required.
- For students intending to use work experience as part of their waiver credentials, a description of the tasks that they were involved in, and how they relate to the core course in corporate finance.

Most upper level finance courses assume a working knowledge of the material covered in the core requirement in corporate finance. As a result, unless your background in finance, either through coursework or work experience, is recent and/or extensive, it is likely that you will be asked to take the Waiver Exam described below. Taking the exam forces you to review the material that will be useful in advanced courses. The exam results improve the evaluator’s ability to decide where you should start in the finance course sequence. We do not want you to be bored sitting through the corporate finance core course, but we also do not want you to struggle later in more advanced courses or job interviews.

**WAIVING CORPORATE FINANCE (FNCE601) BY EXAM**

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

An open-book Waiver Exam will test the students on the material that is covered in the core course in corporate finance. The waiver exam will last three hours. It is intended for the students who have a strong finance background (either through coursework or work experience), but do not have the necessary credentials to waive the core course by the first method described above. Only those students performing well in this exam will be allowed to place out of the core course in corporate finance.

The material from the 9th edition of the textbook by Brealey, Myers, and Allen that will be covered in the waiver exam consists of chapters 1 through 22, with the exception of chapters 12, 13 and 14. Of course, the topics covered in these chapters of the Brealey, Myers, and Allen textbook can be found in other textbooks as well. The books by Ross, Westerfield and Jaffe, and by Grinblatt and Titman are good examples of such textbooks. Given that students may have used different textbooks when studying these topics, you will find sample waiver exams, later in this guide. Lecture notes, problem sets and a number of example exams and solutions can be found on the Wharton webCafé site for this course: https://webcafe.wharton.upenn.edu/eRoom/fnce/601-fa10-1. You will need to use your Wharton username and password to access this site.
SCHEDULE OVERVIEW

This section describes the stages to fulfilling the corporate finance core course requirement. It should help you place yourself on the proper path prior to the fall semester.

Waiver

Preferably, waivers should be submitted in June or July. All waivers must be submitted in hard copy by the deadline date given. Waiver requests submitted after this date or not in hard copy will not be reviewed. See Introduction for deadlines. Students with credentials satisfying the criteria described in the “Corporate Finance Waiver Process” section above should apply for a waiver of the core requirement in corporate finance if so indicated by the responses to the Waiver Questionnaire in the Pre-Term Registration Process. Should the responses so indicate, these students will automatically have the opportunity to join group A described above, and waive the corporate finance core course requirement.

Waiver Exam

This three-hour open-book exam is given at the end of pre-term. The students passing this exam will have the opportunity to join group A described above, and waive the corporate finance core course requirement. They will also have the opportunity to join group C and take the accelerated corporate finance course, if they feel they would benefit from a refresher.

The Corporate Finance Placement Process (FNCE621)

PLACEMENT EXAM: See Waiver and Placement Exam Schedule table in the Introduction to this Waiver Guide

In some cases, a student’s training and/or background will not be sufficient to waive the financial analysis core course requirement altogether, but may well be enough that he/she would want to fulfill this requirement in half a semester (instead of a full semester). In other cases, a student’s analytical background can be such that he/she should be able to grasp the main concepts covered in the financial analysis core course in an accelerated format. Such students typically have prior degrees in engineering, physics, mathematics or statistics, and can easily fulfill the financial analysis core course requirement in half a semester.

Entry into FNCE621 can be achieved by passing the Placement Exam. The Placement Exam is the first half of the Waiver Exam and lasts one-and-a-half hours. It covers material in the chapters 1-4 and 6-7 in Brealey, Myers, and Allen. The second half of the Waiver Exam contains the material covered in FNCE 621, i.e. chapters 5, 8-10 and 14-22. Together, FNCE 604 and FNCE 621 contain the material covered in FNCE 601. Students who have waived Corporate Finance either by credential or exam can also opt to take FNCE621.

The FNCE 604 and FNCE 621 syllabi, with additional class materials, can be found at https://webcafe.wharton.upenn.edu/eRoom/fnce/604-fa10-1 and https://webcafe.wharton.upenn.edu/eRoom/fnce/621-fa10-1 respectively.
To help students prepare for the Placement Exam, a pre-term placement preparation course (FNCE604) will be offered in August. This optional course will cover the material that will be tested in the Placement Exam at a pace very similar to the pace that will be adopted in FNCE621. A syllabus for FNCE 604 follows. It includes a FAQ section that will help you decide if the FNCE604 course is appropriate as well as how FNCE 621 will impact the requirements for the degree.

The syllabi for FNCE601 and FNCE621 that follow will allow students to gauge their level of experience and whether or not they should sit for the Placement Exam.

**SCHEDULE OVERVIEW**

Students wishing to place into FNCE621: Corporate Finance will be expected to sit for the placement exam (see Introduction for the exam date). The Placement Exam is the first half of the Waiver Exam and lasts for one-and-a-half hours. The scripts are collected after one-and-a-half hours. Students only wishing to sit the Placement Exam then leave; students wishing to waive the entire core remain and are given the second half of the Waiver Exam, which lasts for a further one-and-a-half hours. 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 621. Conversely, good performance in the second half of the Waiver Exam does not facilitate placement into FNCE 621.
Syllabus FNCE601

Franklin Allen  2253 SH-DH  
Tel: 215-898-3629  Fax: 215-573-2207  Email: allenf@wharton.upenn.edu  
Office Hours: Mondays: 8:00–9:00 a.m. and 3:00–5:00 p.m., Wednesdays: 8:00–9:00 a.m. and 3:00-4:00 p.m., and by appointment. Questions can be asked by email at any time.

 Overview

This course is intended to provide a market-oriented framework for analyzing the major types of financial decisions made by corporations. Lectures and readings will provide an introduction to present value techniques, capital budgeting principles and problems, asset valuation, the operation and efficiency of financial markets, the financial decisions of firms and derivatives.

Books

The required textbook and special study guide, which can be obtained together at a discounted price at the Penn Bookstore, are:


The latter is a special version of the study guide made for the course that also includes answers from the solutions manual for the end-of-chapter questions in BMA for Chapters 1-21. The price for buying the two together is only a few dollars more than the book itself and much cheaper than buying the book, study guide and solutions manual separately.


Those of you with a limited exposure to finance can consult the glossary at the end of BMA for the financial terms used. For those who want more the following additional text may be useful.


The Bulk Pack for Quarter 1 can be obtained from Study.net or downloaded from webCafé. This contains problem sets, cases, example exams, and lecture notes for the first half of the course. All materials will be made available electronically on webCafé during the course. The Bulk Pack for Quarter 2 will be available in a few weeks.
Calculators and Spreadsheets

The recommended calculator is an HP 17bII+. Older equivalent models such as the HP 17BII or HP 19BII are acceptable. Other calculators such as the HP 10BII, HP 12C, TI BAII or equivalents will put you at a disadvantage in exams. They do not allow you to enter formulas and the old HP 12C is also slow. If you wish to use another calculator, please come and see me to obtain a waiver. More advanced calculators or anything with download capabilities cannot be used. There will be a basic calculator review session. You will also need to know EXCEL at an elementary level in order to do the cases. A brief introduction is posted on Webcafe in the file EXCEL_Introduction.ppt.
Course Outline FNCE601

Quarter 1

WEEK 1

Th: Section 1: Introduction
Read Ch. 1 BMA
Section 2: The Objective Function for Corporations
Read Ch. 1 BMA

WEEK 2

Tu: Section 2 (cont.)

Th: Section 3: Calculating Present Values
Read Ch. 2 BMA

WEEK 3

Tu: PROBLEM SET 1 DUE
Section 4: The Valuation of Bonds and Stocks
Read Chs. 3 and 4 BMA

Th: Section 5: A Comparison of Investment Criteria
Read Ch. 5 BMA

WEEK 4

Tu: PROBLEM SET 2 DUE
Section 5 (cont.)
Section 6: Practical Aspects of the NPV Rule
Read Ch. 6 BMA

Th: Section 6 (cont.)

WEEK 5

Tu: PROBLEM SET 3 DUE
Section 7: Measuring Risk
Section 7(i): Statistics Review
Section 7(ii): A Theory of Asset Pricing: Introduction

Th: Section 7(iii): Mean-Standard Deviation Analysis
Section 7(iv): Diversification and Beta
Read Ch. 7 BMA and Reading for Section 7 on webCafé
WEEK 6
Tu: PEACH CASE DUE BY 9am – UPLOAD TO WEBCAFÉ
Section 8: The Capital Asset Pricing Model
Read Ch. 8 BMA

Th: Section 8 (cont.)

WEEK 7
Tu: PROBLEM SET 4 DUE
Section 9: Capital Budgeting and the CAPM
Read Chs. 9 and 11 BMA

Th: Exam week for MBA Core – No class
Tu: Exam week for MBA Core – No class

Quarter 2

WEEK 1
Thu: Review session during regular class

WEEK 2
Mon: MIDTERM EXAM 6:15-7:45 p.m.

Tu: NO PROBLEM SET DUE
Section 10: Market Efficiency
Read Ch. 13 BMA

Th: Section 10: Market Efficiency (cont.)
Section 11: Issuing Securities
Read Chs. 14 and 15 BMA

WEEK 3
Tu: PROBLEM SET 5 DUE
Section 11: Issuing Securities (cont.)

Th: Section 12: Payout Policy
Read Ch. 16 BMA

WEEK 4
Tu: PROBLEM SET 6 DUE
Section 12: Payout Policy (cont.)
Section 13: Capital Structure
Read Chs. 17 and 18 BMA

Th: Section 13: Capital Structure (cont.)
WEEK 5

Tu:  PROBLEM SET 7 DUE
    Section 13: Capital Structure (cont.)
    Section 14: Investment and Financing Decisions
    Read Ch. 19 BMA

Th:  No class: Thanksgiving Holiday

WEEK 6

Tu:  PROBLEM SET 8 DUE
    Section 14: Investment and Financing Decisions (cont.)
    Section 15: Valuation
    Read Ch. 19 BMA

Th:  Section 15: Valuation (cont.)
    Section 16: Risk Management and Pricing Derivatives
    Read Chs. 20 and 21 BMA

WEEK 7

Tu:  VALUATION CASE DUE BY 9 a.m. – UPLOAD TO WEBCAFÉ
    Section 16: Risk Management and Pricing Derivatives (cont.)

Th:  Case presentations

Mon:  FINAL EXAM: 9:00–11:00 a.m.
Syllabus FNCE621

Professor Simon Gervais
Email: gervais@wharton.upenn.edu
Web: http://webcafe.wharton.upenn.edu/
Office Hours: will be announced at the start of the course, also by appointment.

Overview

This course is intended for students with prior knowledge of finance or with strong analytical backgrounds. Together with the pre-term preparation course (FNCE604), it forms the foundation for subsequent courses in corporate finance, corporate valuation, investments, and financial derivatives. Its purpose is to develop a framework for analyzing a firm’s investment and financing decisions. The course will start where FNCE604 ends. More precisely, it will provide an introduction to capital budgeting techniques under uncertainty, asset valuation, the operation and efficiency of capital markets, the optimal capital structure and dividend 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

The course assumes that students are familiar with the material covered in FNCE604. As a result, it is only available to those students who successfully passed the Finance Placement Exam at the end of the pre-term, or waived the core by credentials. This course is not suitable for students new to finance and with limited analytical backgrounds. This course is hard. The pace is fast, and it requires a major investment of time and effort outside of class. This is not a standard academic class which teaches you how to follow algorithms and plug numbers into formulas to solve problems from a textbook. Instead, the goal is to provide you with a rigorous framework that will allow you to systematically think through real-world finance problems.

In particular, the homeworks are typically more difficult than the examples taught in class (and in the textbook) and you will need to think creatively and use your initiative to solve them. As a consequence, the lectures focus on teaching you both the intuition and the fundamental concepts beneath the formulas, so that you can apply your knowledge to any situation you are confronted with. While I will go through a number of worked numerical examples in the lectures, you will need to supplement these by doing the more complex problems in the bulk pack.

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 that you can then apply to the (more practical) elective classes at Wharton.

¹ Of course, since FNCE604 has already covered about 30-35% of the material studied in a typical finance introduction class, the pace of FNCE621 will effectively be about 35-40% faster than that of FNCE601.
Prerequisites

The prerequisite for this class is a satisfactory performance (as judged by the instructor) in the Finance Placement Exam, which is offered at the end of the pre-term. The typical candidates for passing this Finance Placement Exam are students with prior course or practical knowledge of financial analysis, and students with a strong analytical background (e.g., students with prior degrees in engineering, physics, mathematics, or statistics). On the first day of class, students are expected to be familiar with the material covered in the pre-term course (FNCE604). No time will be spent reviewing that material.

The course makes use of mathematical and statistical manipulations at the level taught in the pre-term courses (STAT603, STAT608 and STAT611). The first two sections (Sections I.4.1 and I.4.2) of the bulk pack are reviews of statistical material that will be extensively used throughout the course. Students are expected to have mastered these sections prior to the course's first lecture.

Course Material

Required for the course is a bulk pack that is available from Wharton Reprographics (basement of SH-DH). It contains the lecture notes that will be presented in class, problem sets and their solutions, sample exams and their solutions, as well as some other useful material. If necessary, additional handouts will be made available on webCafé. I regret that I am unable to post the bulk pack on webCafé. The bulk pack is very comprehensive, and this was achieved by combining my own notes with materials from various other professors and sources. As a result, I am prevented from distributing the bulk pack electronically.

The bulk pack contains more material than that which I intend to teach in class. It includes supplementary material that will not be examined such as institutional details and proofs of equations, which you can read in your own time if it is of interest. It also contains additional exercises and examples that complement those that I will go through in class. Therefore, do not be alarmed if I skip some pages in class.

In addition, the following textbook and special study guide are highly recommended. They can be obtained together at a discounted price at the Penn Bookstore (36th and Walnut):


The latter contains both the study guide made for the course plus the solutions manual for the end-of-chapter questions in BMA. Note that the book is now in its 10th edition, and the chapter designations and suggested questions in the lecture notes only apply to this new edition. The reason I designate the books as “highly recommended” rather than “required” is that students in the past have been able to do well in the course just by reading the lecture notes and doing the problem sets in the bulk pack, since they are comprehensive. The problems in the bulk pack are more
complicated than those in BMA and a fairer indication of the level of the problems in the exam.

The book is particularly useful for (a) simpler problems (to ease you into the more complex problems in the bulk pack), and (b) as an additional source for material that you may have found challenging when taught in class (since the lecture notes are slides, they are necessarily concise, and the book provides much more detailed explanations). The book is also useful for many finance electives at Wharton.

Although I will try to explicitly define every finance term used in the course, it is possible that some students will be unfamiliar with some of the terminology used in our discussions. To bridge these gaps (or, at the very least, to help in all your other finance courses at Wharton), I recommend the following “finance dictionary”:


### WebCafé

The course site at Wharton webCafé contains material essential for this class as well as most updated information and announcements for the course. webCafé is the information center for the course. Please check the course site regularly. In particular, it is most efficient to ask questions (either on course material or on administrative items) on the Discussions section of webCafé rather than emailing the TAs and instructor. This means that all students can read our answers, saving the same question being asked multiple times. It also likely leads to a faster response since any of us can respond to the question. Only questions regarding the assignments should be emailed to the TAs (since posting them on webCafé might reveal part of your answer).

### Calculators and Computers

You will definitely need a calculator for the course (and the two exams). Any calculator that has a $x^y$ 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. If you do not have a calculator yet, consider buying an HP-17BII, HP-19BII, or their subsequent models, as they will probably be useful for other Wharton courses. Neither laptop computers nor handhelds will be allowed for the exams.
Course Outline FNCE621

The material for this course essentially corresponds to chapters 5, 8-10 and 14-22 of the BMA textbook. Below is the sequence of topics that will be covered in class, along with the relevant chapters/sections in BMA.

I. Investment Decisions (Under Uncertainty)

I.4 The Valuation of Risky Cash Flows
   I.4.1 Statistics Reminder
       (see STAT603, STAT608 or STAT611)
   I.4.2 Statistics and Stock Portfolios
       BMA, Chapter 7.
   I.4.3 The Capital Asset Pricing Model
       BMA, Chapter 8.
   I.4.4 The Valuation of Stocks
       BMA, Chapter 4.

I.5 Capital Budgeting Under Uncertainty
   BMA, Chapter 9.

II. Financing Decisions

II.1 Efficient Capital Markets: Theory and Evidence
   BMA, Chapter 13.

II.2 An Overview of Long-Term Financing
   BMA, Chapters 14-15.

II.3 Dividend Policy
   BMA, Chapter 16.

II.4 Debt Policy
   BMA, Chapters 17-18.

III. The Interaction of Investment and Financing Decisions
   BMA, Chapter 19.

IV. Options

IV.1 The Valuation of Options
   IV.1.1 Understanding Options
       BMA, Chapter 20.
   IV.1.2 Option Pricing
       BMA, Chapter 21.

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 FNCE604

Professor Simon Gervais
Office Hours: will be announced at the start of the course, also by appointment.
WebCafe: http://webcafe.wharton.upenn.edu/

Overview

This pre-term course is intended for those students wishing to prepare for the Placement Exam to get into FNCE621. The FNCE621 course will fulfill the core requirement in financial analysis in half a semester, instead of the usual full semester course, FNCE601. Only students with prior knowledge of financial analysis (either by coursework or by practical experience), or with strong analytical backgrounds should consider taking this course and the Placement Exam. This course is not suitable for students new to finance and with limited analytical backgrounds. The pace of FNCE604 is fast, and the pace of FNCE621 will be even faster. Please do not take this course unless you are fully comfortable with an accelerated pace and intense workload.¹

Together, FNCE604 and FNCE621 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, FNCE604, will provide an introduction to present value and capital budgeting techniques under certainty. The FNCE621 course will start where FNCE604 stops, and will cover capital budgeting techniques under uncertainty, asset valuation, the operation and efficiency of capital markets, the optimal capital structure and dividend policy of the firm, and options. In short, FNCE621 will cover all the topics of a typical semester-long finance introduction class in six weeks.

In order to cover everything in a condensed time period, the course workload and lecture pace will be intense throughout and students taking this course should be prepared for this. 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 that you can then apply to the (more practical) elective classes at Wharton.

Prerequisites

Although there are no official prerequisites for FNCE604 and FNCE621, both courses will make use of mathematical and statistical manipulations at the level taught in the pre-term courses (STAT603, STAT608 and STAT611). We may also make very sporadic use of calculus, but knowledge of calculus is not at all necessary for this course, nor is it for the Placement Exam or FNCE621.

¹. This pace will be about 35-40% faster in FNCE621 vs. FNCE601 given the pre-term headstart.
To give you an idea of the level of mathematics and statistics at which this course (and FNCE621) will be taught, the bulk pack (see “Course Material” section below) contains a “math/stat reminder” that you should take a look at early in the course. There will also be a “statistics reminder” section in the FNCE621 bulk pack, but you should keep in mind that we will not explicitly go over that section in class. Given that this material is covered in depth in the pre-term courses in statistics, this will allow us to concentrate on finance material.

Course Material

Required for the course is a bulk pack that is available from Wharton Reprographics (basement of SH-DH). It contains the lecture notes that will be presented in class, problem sets and their solutions, sample exams and their solutions, as well as some other useful material. If necessary, additional handouts will be made available on webCafé. I regret that I am unable to post the bulk pack on webCafé. The bulk pack is very comprehensive, and this was achieved by combining my own notes with materials from various other professors and sources. As a result, I am prevented from distributing the bulk pack electronically.

The bulk pack contains more material than that which I intend to teach in class. It includes supplementary material that will not be examined such as institutional details and proofs of equations, which you can read in your own time if it is of interest. It also contains additional exercises and examples that complement those that I will go through in class. Therefore, do not be alarmed if I skip some pages in class.

In addition, the following textbook and special study guide are highly recommended (they are also highly recommended for FNCE621, and required for FNCE601). They can be obtained together at a discounted price at the Penn Bookstore (36th and Walnut):


The latter contains both the study guide made for the course plus the solutions manual for the end-of-chapter questions in BMA. Note that the book is now in its 10th edition, and the chapter designations and suggested questions in the lecture notes only apply to this new edition. The reason I designate the books as “highly recommended” rather than “required” is that students in the past have been able to do well in the course just by reading the lecture notes and doing the problem sets in the bulk pack, since they are comprehensive. The problems in the bulk pack are more complicated than those in BMA and a fairer indication of the level of the problems in the exam.

The book is particularly useful for (a) simpler problems (to ease you into the more complex problems in the bulk pack), and (b) as an additional source for material that you may have found challenging when taught in class (since the lecture notes are slides, they are necessarily concise, and the book provides much more detailed explanations). The book is also useful for many finance electives at Wharton.
Although I will try to explicitly define every finance term used in the course, it is possible that some students will be unfamiliar with some of the terminology used in our discussions. To bridge these gaps (or, at the very least, to help in all your other finance courses at Wharton), I recommend the following “finance dictionary”:


**Grading and Exam**

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 FNCE621. This will be an open-book exam. You can use your notes and the textbook.

About 120–160 students are usually admitted into FNCE621 after the Placement Exam. Together, FNCE604 and FNCE621 will cover the same material as in the regular-paced FNCE601.

The Placement Exam also constitutes the first half of the Waiver Exam. The second half of the Waiver Exam is from 6:30pm to 8:00pm (on the same date as the Placement Exam) and covers the material taught in FNCE621. If you are aiming to waive the entire core, you must complete both parts of the exam. If you are only aiming to place into FNCE621, 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 FNCE621. Conversely, good performance in the second half of the Waiver Exam does not facilitate placement into FNCE621.

**Waiver Exam**

The Placement Exam serves the role of placing students into the faster-paced FNCE621, instead of the normal-paced FNCE601. The Waiver Exam is used to waive the core finance requirement altogether (i.e., waive both FNCE601 and FNCE621).

**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 class for which they are registered. In the case of an unavoidable conflict, 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. In addition, students not registered for this course may audit lectures without asking my permission first (if there is a shortage of seats, please give priority to registered students). Please display your name cards in class at all times so that I can get to know you.
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 Blackberrys/iPhones 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 make clear that I expect you to adhere to the school’s code of academic conduct (www.vpul.upenn.edu/osl/academic.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. Cheaters will be hauled before the Ethics Committee and may be given an automatic fail. I also ask my TAs to photocopy a significant portion of the exams, and so I am likely catch any regrade-related cheating as a result.

Preparing for Classes

The material for this course (and for FNCE621) needs to be absorbed consistently. As the course progresses, students should work on the problem sets contained in the bulk pack, and on the textbook problems that I will recommend. Even though not formally graded in FNCE604 (they will be in FNCE621), these problems are an integral part of the course and it is insufficient just to 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 strongly recommended that you read up on the lecture notes ahead of time. You should have mastered all the material covered in previous classes, and looked at the sample problems for previous classes before each lecture. Students are also encouraged to read in the BMA textbook the chapters/sections relevant to the material covered in class. To facilitate this process (and your planning), the lecture notes contain “checkpoints” that will guide you through the relevant readings and problems.

Teaching Assistants and Problem Solving Sessions

One or two students who have previously taken the financial analysis course and have done well in it will be assisting me in this pre-term course. Their names will be announced later in the course. Their main task will be to hold two problem solving sessions. During these problem solving sessions, the teaching assistants will go over the solutions to the problem sets. These sessions are completely optional.

WebCafé

The course site at Wharton webCafé contains material essential for this class as well as most updated information and announcements for the course. webCafé is the information center for the course. Please check the course site regularly. In particular, it is most efficient to ask questions (either on course material or on administrative items) on the Discussions section of webCafé rather than emailing the TAs and instructor. This means that all students can read our answers, saving the same question being asked multiple times. It also likely leads to a faster response since any of us can respond to the question.
Calculators and Computers

You will definitely need a calculator for the course (and the Placement Exam). Any calculator that has a $x^2$ 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. If you do not have a calculator yet, consider buying an HP-17BII, HP-19BII, or their subsequent models, as they will probably be useful for other Wharton courses. Neither laptop computers nor handhelds will be allowed for the Placement Exam.

Frequently Asked Questions

Here are a few typical questions about the finance core requirement that students have upon arriving at Wharton in the Summer of their first year.

Q: I have waived the finance core requirement by credentials, or by passing the waiver exam, am I also waived for FNCE621?

A: Yes. The waiver is for the core requirement, that is both FNCE601 and FNCE621. If you wish, you may still take FNCE621.

Q: Can I place directly into FNCE621 by credentials?

A: The only way you can place into FNCE621 without passing the Placement Exam is if one’s credentials are strong enough to waive the entire core requirement. (See the Waiver Guide for the process of waiving by credentials.) There is no separate, lower credentials hurdle to allow a student to place directly into FNCE621. Students who are unable to waive the entire core must pass the Placement Exam. This is to ensure that they have all of the FNCE604 material at their fingertips, allowing me to teach at an accelerated pace in FNCE621.

Q: If I am sure that I will be taking FNCE601, is there any reason for me to attend the pre-term course (FNCE604)?

A: Since FNCE601 will start exactly where the pre-term course starts, the only reason why somebody would want to attend FNCE604 would be to get a preview of what FNCE601 will cover in the first month of the Fall semester. I am happy for such students to attend, but stress that I will teach at a rapid pace which may be difficult to follow for students new to finance. Similarly, students who have already waived by credentials may sit in FNCE604. You do not need to obtain my permission if you wish to sit in FNCE604 without intending to take the Placement Exam.

Q: I have waived by credentials or by taking the waiver exam. Is it still a good idea to take FNCE621?

A: If you have waived by credentials, it is your duty to make sure that you are familiar with the material that is covered in the core course (chapters 1-9 and 13-21 of the BMA textbook). This can be done by simply refreshing your memory through reading the textbook (in a lot of
cases, this will be enough), by auditing (sitting in) FNCE621 or FNCE601, or by taking FNCE621 or FNCE601 for credit. If you have waived by credentials, you do not need to take the placement exam to get into FNCE621. Keep in mind that you will not get any credit for auditing a course. In addition, it is necessary to do the assignments to get the most out of FNCE621; taking it for credit may help ensure you do so.

Q: Is there a course to help me prepare for the Waiver Exam?
A: Unfortunately not. FNCE604 only prepares you for the Placement Exam. To prepare for the Waiver Exam, you should review the other chapters of BMA, and do the sample Waiver Exam in the Waiver Guide.

Q: Do FNCE621 and FNCE601 cover the same material? Are there any differences between the two courses?
A: The exact same material covered in FNCE601 is covered in the FNCE604/621 sequence. Both courses use the same textbook, by BMA (10th edition), and cover its chapters 1-9 and 13-21. The two courses use a different set of lecture notes, reflecting the fact that FNCE604/621 will proceed 35-40% faster than FNCE601. FNCE621 also tackles extra-curricular topics and aims to go into the material in greater depth than required for the assignments. Finally, the problem sets and exams will be different to reflect the fact that the two courses are not synchronous, but will have about the same level of difficulty.

Q: If I start in FNCE621 but find it too fast, will it be possible for me to transfer into FNCE601? Will I be penalized for it?
A: Yes, you can transfer; no, you will not be penalized. Since FNCE621 will be ahead of FNCE601, we will make it easy to transfer back to the regular-paced course. In fact, this will be possible up until the last day of class in FNCE621, since no exam will have been administered in FNCE601 at that point. Since the problem sets and cases are different between the two classes, the grades from the FNCE621 assignments will not be transferred over. Instead, the weights on the missed FNCE621 assignments will be redistributed to the FNCE601 assignments that they do complete.

Q: If I start in FNCE601 but find it too slow, will it be possible for me to transfer into FNCE621?
A: No. Since FNCE621 will be ahead of FNCE601, we cannot allow students to transfer to the accelerated version of the core course mid-semester.

Q: I have passed one or more exam(s) of the Chartered Financial Analyst (CFA) program. Can I use it/them towards waiving the core requirement in finance?
A: You cannot waive the core requirement just with CFA credits. Indeed, even though the CFA exams cover a wider range of topics than FNCE601/604/621 do, the topics that represent
essential background to elective courses in finance at Wharton are not covered as rigorously as needed in these exams. The waiver process requires 2 semester-long academic classes at the level of the BMA textbook within the last five years. If these classes fall just outside the 5-year window, a waiver may be granted if the student has worked in a pure finance job (e.g., investment banking, private equity) constantly since graduation. If you wish to use work experience to help waive the 5-year window, you may include your CFA credentials as part of the application. However, 2 academic classes are still required—work experience can only extend the time window, and cannot serve as a substitute for taking these classes.

Q: How many credits do I get for taking FNCE621?
A: Since FNCE621 is only a half-semester course, it only costs 0.5 credit units (whereas FNCE601 costs a full credit). However, FNCE621 gives you one full credit unit towards attaining a finance major (as with FNCE601). Therefore, students passing FNCE621 only require 5 additional credit units to major in finance.

Q: Will I hinder my grade by taking FNCE621 because I will be “curved” against students with prior financial experience?
A: No. Even though FNCE601 and FNCE621 are graded on separate curves, the average grade given to FNCE621 students is somewhat higher, to reflect the greater financial experience of FNCE621 students. In accordance with Wharton grading policy, the weighted average across FNCE601 and FNCE621 combined can be no higher than 3.33, but the average FNCE621 grade is allowed to (and typically does) exceed 3.33.

Q: Can I take FNCE621 and ACCT621 together?
A: Yes, you can. Many students do, and do so successfully. However, please be aware that your workload will be very intense since you will be taking two accelerated courses at the same time. In particular, the midterms of both exams are in week 3, which also features many other core assignments. Please refer to syllabi of FNCE621, ACCT621 and all other courses you will be taking in Q1 to see the workload that you will have if you take both FNCE621 and ACCT621 together, and only register for both courses if you are happy with this workload. Of course, different students handle different workload pressures differently, so the optimal decision will vary from person to person. Also, if you waive MGEC621, that will lighten your workload, in particular by removing the MGEC621 midterm from week 3. One potentially important advantage of taking FNCE621 and ACCT621 together is that you will have Q2 much freer for recruiting.

2. Note that the core faculty meet every year to try to spread out the assignments across the different classes as evenly as possible. We are aware of the high workload in week 3 and it is indeed less packed than it used to be. However, there is unfortunately a limit to how much we can spread the assignments out — with a 6-week class, the midterm has to fall close to the 8th/9th class. Having it significantly earlier means there’s little to test you on; having it significantly later means there’s little to test you on for the final. It is useful to have the final test different material from the midterm to give students who do poorly in the midterm a chance to “recover” in the final.
Course Outline FNCE604

The material for this course essentially corresponds to the first 6 chapters (except for chapter 4 and section 3-2) of the BMA textbook. Below is the sequence of topics that will be covered in class, along with the relevant chapters/sections in BMA.

0. Introduction

BMA, Chapter 1.

I. Investment Decisions (Under Certainty)

I.1 Compounding and Discounting

I.1.1 Constant Interest Rate

BMA, Chapter 2 and Section 3-5.

I.1.2 Term Structure

BMA, Sections 3-3 and 3-4.

I.2 The Valuation of Safe Cash Flows: Pricing Bonds

BMA, Section 3-1.

I.3 Capital Budgeting Under Certainty

I.3.1 The NPV Rule: Theoretical Foundations

BMA, Section 5-1.

I.3.2 Using the NPV Rule for Capital Budgeting

BMA, Chapter 6.

I.3.3 Alternatives to the NPV Investment Rule

BMA, Chapter 5.

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 (FNCE602)

Course Description
This course presents the analysis of macroeconomic theory with a current events perspective. The purpose of this course 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 economic 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 the course covers 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 Macroeconomics 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. Foreign students, in particular, have found the emphasis on American markets and institutions to be unique and unlike the material covered in their own courses.

WAIVING BY CREDENTIALS
DEADLINE: See Waiver Introduction to this Waiver Guide.

Waivers by credentials are granted to students who are economics majors or who have had substantial economics training as an undergraduate. The absolute minimum requirement for a waiver in FNCE 602 is as follows:

- two semester courses in macroeconomics: the first a principles course in macroeconomics, and the second either (1) intermediate macroeconomics, (2) money and banking, or (3) international finance. Students must have earned a grade of “A” or “B” in both of these classes and have taken the classes no more than five years ago. Note that classes in microeconomics, price theory, industrial organization, international trade, and similar courses do not qualify for a macroeconomics waiver. Because of the rapidly changing economic environment, those who have taken macroeconomics classes more than five years ago will likely find that they do not have the tools to analyze or understand current economics situations.

Documenting Your Credentials
Students applying for waivers by credentials in macroeconomics should send as much evidence as is available about the nature of the macroeconomic courses taken. This may include reading lists, exams, class reports, etc. No waiver is considered without complete transcripts of all university and college courses taken, with the macroeconomics classes highlighted by the student.
WAIVING BY EXAM

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

Those students who do not meet the requirements for a waiver by credentials but feel they have sufficient understanding of the subject may sit for the macroeconomics waiver examination given at the beginning of each semester.

Exam Preparation

There is no pre-term review course for Macroeconomics and the Global Environment. Students sitting for the exam may find it useful to review any standard macroeconomics text such as Macroeconomics, by (1) R. Dornbusch, and S. Fischer, or (2) Robert Hall and John Taylor, or (3) Andrew Abel and Ben Bernanke. It is suggested that the student review all basic concepts and be extremely familiar with solving, analytically, for the equilibrium in a standard ISLM model.
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.


Course Materials

Required purchase: CP Course Pack of Readings and Lecture Notes from Wharton Reprographics

Students who wish to subscribe to The Wall Street Journal should use the following link:
http://subscribe.wsj.com/semester or for Barron’s: http://barron's.com/student
Please include my name as the Instructor.
Course Outline

KEY
RN = Class Review Notes
PS = Problem Set

Sessions 1-2: Introduction, Econ Statistics
RN 1-15: Economic Data and Markets 2 wks.

NO CLASS – Martin Luther King Holiday

Session 3: Econ Stat (cont’d), Price Indices
RN 15-23

NO CLASSES – Dedicated Interview Period

Sessions 4-5: Government Budgets, Social Security, and Future Demographic Trends
RN 24-27

Sessions 6-7: Monetary Policy; Fed Funds Rate
RN 28-47
PS #1: GDP & Price Indices

NO CLASSES – Dedicated Interview Period

Sessions 8-9: Central Bank Structure
RN 28-38

Sessions 10-11: Interest Rates: Loanable Funds and Fisher Equation
RN 48-59

Session 12: Term Structure of Interest Rates
RN 60-67
PS #2: Money Supply

NO CLASS – MBA Midterm Week

NO CLASSES – Spring Break

Sessions 13-14: Equilibrium with Money and Goods
RN 68-81
PS #3: Interest Rates
Sessions 15-16: Equilibrium with money and goods (cont.)
  PS #4: Term Structure

MIDTERM

Sessions 17-18: Money and Inflation
  RN 82-88
  PS #5: Aggregate Demand

Sessions 19-20: Reactions of Financial Markets
  RN 89-100
  PS #6: Money and Inflation

Sessions 21-22: Price Level in a DD-RR Model
  RN 101-114
  PS #7: Financial Markets

Sessions 23-24: Phillip's Curve and Government Policy; Balance of Payments
  PS #8: Flexible Price DDRR Model

Sessions 25-26: Theory of Exchange Rates
  RN 114-125
  PS #9: Int. Exch. Rates
  RN 115-126

FINAL EXAMINATION
Economics of Managerial Decision Making (MGEC621)

Course Description

MGEC621 utilizes microeconomic foundations to investigate strategic managerial decisions under a variety of scenarios that have real-world applicability. These scenarios relate to competitive situations involving many or few competitors and where cooperation is possible and where it is not possible. They also relate to situations where information required to make business decisions is not as rich as the decision maker would like — both when the decision maker is a buyer and when a seller.

The objectives of the course are: (1) to relate the tools of microeconomics closely to current management decision making within the context of a global corporate environment; (2) to teach some of the newer and more powerful tools of microeconomics, that are both used and useful, to MBA students; and (3) to prepare students for other courses that follow in the MBA curriculum.

There are three options for fulfilling the MGEC621 requirement:

1. Take the half-semester course. NOTE: Knowledge of the materials in MGEC603 (the August course in basic microeconomic principles) will be assumed in MGEC621. In addition, basic mathematical skills (as developed in the August math review courses) will be assumed.

2. Waive the requirement by exam or credential.

3. Substitute MGMT784, Managerial Economics & Game Theory for the MGEC621 requirement. This is an option only for students who have a strong microeconomics knowledge base but lack recent experience in the game theoretic approach to oligopoly and cartels, imperfect information, and the structure of markets and organizations. This option is at the discretion of the waiver advisor; those students who qualify will be informed of this option after submitting their credentials or completing the waiver exam. It is the student’s responsibility to review the course description and schedule for MGMT784.

The Microeconomics Waiver Process

Due to its applied nature, MGEC621 should interest all students. Indeed, since insights developed in MGEC621 are important in many subsequent courses, all MBA students at Wharton need to be comfortable with the tools and decision rules of this course. Although everyone is, therefore, encouraged to take MGEC621, some students (e.g., undergraduate economics or managerial economics majors) may feel that their backgrounds permit them to gain understanding of these tools and decision rules without taking the course (perhaps by working through the course material on their own).
WAIVING OR PLACING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide.

Students who have demonstrated, from previous coursework, a sound understanding of contemporary microeconomic theory as applied to managerial decision making may request a waiver by completing a waiver form. Such previous study MUST include a game theoretic approach to oligopoly and cartels, imperfect information, and the structure of markets and organizations. This coursework must have been completed within the past seven years, with a grade of “A.” A grade of A- will not qualify for a waiver. In general, this material would be covered in a contemporary intermediate managerial economics course, an intermediate microeconomics course, or an intermediate industrial organization course. An introductory course will not qualify for a waiver.

Students who will be allowed to substitute MGMT784, Managerial Economics & Game Theory, for the MGEC621 course will be notified of the opportunity at the end of the waiver-by-credential process. (In general, they will be students who received an A in the relevant courses listed above, but in the eight-to-nine year range or students who received an A- in the relevant courses listed above within the last seven years.) For a description of MGMT784, see the departmental website or refer to the MBA Resource Guide.

Documenting Your Credentials
Specific information that MUST be submitted with the waiver form includes a transcript and the reading list from the course that is proposed as suitable for waiver by credentials. If you do not submit this information, your request will not be evaluated. The reading list must be from the year in which you took the course, not from the current list. A course catalog description is not sufficient.

WAIVING 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 waive MGEC621 or will be allowed to substitute MGMT784, Managerial Economics & Game Theory, for the MGEC621 course will be notified of the opportunity after the exam.

Exam Preparation
The MGEC faculty will offer a short waiver preparation course during Pre-Term (MGEC608) for those students wishing to take the examination (see the Introduction for dates). This waiver course is optional and not required to sit for the waiver examination.

The following material may be helpful in preparing for the MGEC621 waiver exam:

Syllabus

Overview

The mission of this course is to develop your ability to think about managerial problems from an economic perspective. In Managerial Economics, we focus more on prescription than on description. As such, this is not a course in economic theory; instead, we think of MGEC 621 as a tutorial in applying fundamental economic concepts to complex realities. You will find that MGEC 621 forms the intellectual underpinning for many of the courses you will take at Wharton.

The above does not mean that we will not cover the theory in this course. In fact, we will develop the intuition behind each concept, the theory to demonstrate the concept, and, most important, the application of the concept to a problem designed to mirror a problem a manager may face.

Knowledge of the materials in MGEC603 (the Preterm course in basic microeconomic foundations) will be assumed in MGEC621. The 603 materials will NOT be reviewed in MGEC621 and the first day of class will be a full class session of material which builds on the 603 content. In addition, basic algebra and calculus skills (as developed in the Preterm math camp) will also be assumed. In addition, the topic of MGEC 603 lecture 8 (price discrimination) will also be considered MGEC 621 material and subject to testing in MGEC 621 examinations/quizzes.

The course is calculus based. The text provides the words and the story surrounding the concepts, and the class notes and lectures provide more words and stories and all utilize the calculus to demonstrate the words and to solve problems.

Reading

TEXT


It is available at the University of Pennsylvania Bookstore. This is the same text used in MGEC 603/608 (the Preterm MGEC courses). Please note that the 7th Edition is significantly different than the 6th Edition, especially for material covered by MGEC 621.

CLASS NOTES AND ADDITIONAL EXERCISES

Class notes are provided in advance of each class on the course website. Please take a quick read through them before class, including the attached reading (if any). In some cases, you will notice “blanks” in the slides/notes, which are designed to motivate classroom discussion and promote critical thinking. If you miss class then see a colleague to “fill in” the blanks; office hours are reserved for students who attend class.

Past exams and some additional problems for each class will also be distributed.
Course Outline

Session 1: Introduction, Motivation And Review

Sophisticated Pricing Strategies

Session 2: Two-Part Tariffs

Background: Continues the pre-term discussion of pricing when a firm has market power. A two-part tariff is a sophisticated way to a firm to increase their profits by capturing more consumer surplus. This type of pricing is used extensively by country clubs, eating clubs, sports stadium personal seat licenses, phone company call plans.


Session 3: Transfer Pricing

Background: In a conglomerate world, company A and company B may be owned by the same parent company. If company A uses the product of company B as an input to their production process, the question of the appropriate price to be paid for B’s product by A is a contentious one. Setting the right “transfer prices” aligns incentives and helps the parent company maximize profits. Examples include IT services within many companies and GE’s internal consulting group.


Profit Maximizing Strategic Behavior in Oligopolistic Markets

Session 4: Strategies in Duopolies I

Session 5: Strategies in Duopolies II (and catch up)

Background: In an oligopoly situation, we have competition among a few firms. This is the most common form of business competition in most large markets of the world: Coke vs. Pepsi, Intel vs. AMD, and so on. Within this general marketing setting, competition differs further among two dimensions: (1) the degree of market power / contestability and (2) the degree in which one party has a first-mover advantage. We explore how to maximize profits in each case.


Influencing Your Market Setting

Session 6: The Static Setting

Background: The powerful tool of game theory is introduced and used to explore how you can influence your market setting in order to move from less to more profitable situations. In this lecture, we first investigate how to influence your market setting in a “static setting” where actions tend to be more “one off” and so the role of reputation is less important. We consider the incentives to collude with your competition as well as attempts to deter entry.

Reading: ADWM, Chapter 11, “Game Theory”
MIDTERM EXAM: covering material from sessions 1 through 5.

Session 7: The Dynamic Setting
Background: We now extend our analysis to investigate how “reputation” influences your ability to collude or deter entry.

Dealing with Asymmetric Information and Uncertainty

Session 8: Auctions
Background: Auctions are used by sellers to obtain information on how much consumers value an item and to attempt to extract the highest possible price for the item. Examples include the Jackie Onassis possessions, the FCC communications spectrum, Treasury securities, and stock repurchases.
Reading: ADWM, Chapter 12, “Auctions”

Session 9: Decision making Under Uncertainty and Insurance
Background: Focusing on the expected return of an investment can be misleading. We discuss how to make decisions under uncertainty and the value of hedging against that uncertainty.
Reading: ADWM, Chapter 13, “Risk Analysis”

Session 10: Adverse Selection
Background: Markets often fail in the presence of asymmetric information between buyers and sellers because only the “lemon” (low quality or high risk) is offered for sale (or wants to buy) in equilibrium. Examples abound from the sale of used cars, demand for insurance, and even trades of athletes. In some cases, government policy enhances the problem. We investigate how to use “screens” and “signals” to deal with this business-critical problem.
Reading: ADWM, Chapter 15, Adverse Selection
Note: Some professors might prefer to teach the material in Lecture 11 before Lecture 10.

Session 11: Moral Hazard
Background: Moral hazard is a second type of problem that can occur in the presence of asymmetric information. A party changes its level of risk taking in response to the protection that he/she is provided, sticking more risk to the counterparty. The structure of executive compensation attempts to deal with a key moral hazard – between executives and shareholders -- and has received considerable attention recently. Attempts to deal with moral hazard must always balance the diversification risk of the party whose behavior is the focus of control.
Reading: ADWM, Chapter 14, “Principal-Agent Issues and Managerial Compensation”
Session 12: Externalities and Common Pool Resource Problems (if time permits)

Background: Certain actions like air pollution create “market failures” because firms do not pay the fair market price for the harm that they cause others, thereby generating so-called “externalities.” Appropriate government regulation is one way to correct the problem; under some conditions, the private market can also correct it even without government interference. This class produces insight into when government action is needed to improve the market outcome and when it is not needed.

FINAL EXAMINATION COVERING ALL SESSIONS
Management of People at Work (MGMT621)

Course Description
Organizational life is built around a complex interplay of social forces. Networks of cooperation, group conflicts, systems of power and influence, career paths, and reward systems shape how people and organizations manage and are managed. The purpose of this course is to provide a framework for analyzing the impact of these social forces on individuals, groups, and the organization. MGMT621 will introduce you to general theories of organizational behavior and human resource management, and their application to specific managerial problems. The concepts covered in this course will help you better understand how to motivate and lead those you manage, as well as better understanding your own motivation and performance at work. Managerial and professional careers involve frequent changes in responsibilities, so the course also provides concepts for analyzing how managerial approaches may vary in different organizational and industry settings. We will discuss, based on these analyses, how to develop and implement organizational designs and human resource systems that achieve competitive advantage through the management of people.

The Management of People at Work Waiver Process
Students may consider waiving this course if they have had prior academic work on these topics. Whether waiving by exam or by credential, students must demonstrate possession of the academic material and concepts, not simply an understanding of the practical problem. As explained below, prior work experience is not an acceptable basis for a waiver. Further, we encourage students to take MGMT621 even if they have taken a similar course in the past. We find that students benefit from exposure to and discussion of the course concepts, theories, and cases even if they have studied these issues previously. Late waiver applications will not be reviewed.

Waiving by Credentials

DEADLINE: See Introduction to this Waiver Guide.

Because this course covers a diverse set of topics, a successful waiver application might be based on more than one prior course in areas such as organizational behavior/industrial psychology (focused on employment issues), the sociology of work, human resources, etc. You may be eligible for a waiver if you have taken one or more such courses in the past five years for which you have received a grade of B+ or better. Syllabi will be required for a credential review.

Under certain circumstances, we will offer the possibility of substituting another course for MGMT621. This option will be offered to students who have some relevant past course work but do not meet the full requirements for a waiver by credential.
Practical experience managing employees, while vital to understanding this material, is not grounds for a waiver. Waivers are also not granted on the basis of on-the-job training or off-the-job management development programs. The course material is chosen to provide new perspectives and new conceptual tools for understanding your past managerial experience; it is generally very difficult to gain sufficient critical distance from one’s own experience to gain insights of this kind while on-the-job. Similarly, corporate training programs typically lack the academic foundation necessary to understand more complex management issues.

WAIVING BY EXAM

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

Exam Preparation

There is no pre-term preparation course for Managing People at Work. See below for a sample waiver examination.
Overview

The purpose of this course is to provide a framework for analyzing the issues associated with managing people. Management 621 will introduce you to topics such as motivating employees, managing performance, understanding careers, and the interface between management decisions and strategy. The concepts covered in this course will help you gain insight into how to motivate and lead those you manage as well as better understand your own motivation and performance at work.

Managerial and professional careers involve frequent changes in responsibilities, so the course also provides concepts for analyzing how managerial approaches may vary in different organizational and industry settings. We will discuss, based on these analyses, how to develop and implement organizational designs and systems that achieve competitive advantage through the management of people.

After working for several years, individuals often have developed a number of insights into how people behave in organizations, and how organizations in turn shape that behavior. We will draw upon your experiences to develop ways of understanding and analyzing the issues around the management of people covered in this course.

The “managing people” issues in this course have links to issues developed in MGMT 654, “Corporate Strategy” (Quarter 2), OPIM 631, “Operations Management: Quality and Productivity” (Quarter 3) and to MGMT 652, “Foundations of Teamwork and Leadership” (Pre-Term). We will develop linkages with these courses as appropriate.
Course Readings

The course readings and cases are collected in a course pack available from Wharton Reprographics on Study.net. You may order a printed copy from Wharton Reprographics. You will receive various handouts throughout the course, the cost of which will be charged to you separately. We estimate that the handout cost will be under $20.

Communication

The primary means of communication outside of class is the course web page on webCafé. You can reach the webCafé room for the course at http://webcafe.wharton.upenn.edu.
Course Outline

Session 1. Introduction to Managing People in Organizations

**Description:** In this class, we emphasize the central goal for the course: to provide students with insights into the complexities of human behavior in organizations. We describe the sequence of topics, from the individual level (motivation, job design, equity issues) to the group level (stimulating effective group performance, group decision-making) and the organizational level (culture, human resource systems and the link to business strategy). We also review course requirements, discuss the Google minicase, and touch on key issues in the Murray and Sutton articles.

**Readings:**

**Case:** The Voices of Google, *Fast Company*, February 14, 2008.

1. Would you like to work in a company with a structure and culture like Google? Why? Why not?
2. What do you think it is like to manage people at Google?
3. Suppose you were advising another company that wanted to imitate Google’s culture? What issues would it need to think about?

Session 2. Motivating Individual Performance

**Description:** We begin with an obvious truism about human behavior in organizations—that people will behave according to what actions they perceive are being rewarded. We then begin our exploration of the theme “behavior is not that simple” by pointing out how often organizations “reward A while hoping for B.” We also introduce various motivation theories from the behavioral sciences and contrast them with more economics-based views of motivation (e.g. agency theory) which emphasize financial incentives and contract-based goal alignment.

**Readings:**


**Case:** Nordstrom Department Store

1. Who sets the performance goals, and how are they set?
2. What are the major positive and negative effects of this incentive system?
**Session 3. Designing Reward Systems**

**Description:** Here we focus on the design of reward systems, keeping in mind various cognitive processes that affect motivation. We introduce concepts from equity theory, which describes how individuals assess the ratio of outcomes (pay, recognition) in relation to inputs (of effort, skill, experience) for themselves in comparison with others. We then consider the actions (and shifts in perception) individuals may undertake to establish a sense of equity. The case discussion emphasizes how the compensation and reward system of an organization must balance incentive and equity concerns. We also explore the role of the labor market in constraining the kinds of compensation systems firms can implement. Please come prepared with examples of reward systems you have encountered and we will examine them for cross-industry and cross-cultural differences.

**Readings:**

**Case:** Brainerd, Bennis, and Farrell
1. How should the lawyers listed at the back of the case (A-F) be paid?
2. Please meet with your learning team and decide how to apportion 100 points between them. Come to class ready to present and defend your choice.

**Session 4. Designing Jobs**

**Description:** We next examine job design – one important source of implicit rewards at work. We compare Frederick Taylor’s scientific management approach, first put forth in the early 1900s but still influential today, with Hackman and Oldham’s job design theory, which analyzes the five characteristics of a job that contribute to its motivational potential. We then explore how poor job design can kill motivation even when explicit incentives are well-designed — or how even an excellent job design can’t overcome poor incentives or poor leadership.

**Readings:**

**Case:** Jennifer Henderson and the International Division at Trustworthy Trust
Put yourself in the role of Steve Darien, who must recommend changes (if any) in the current performance appraisal and salary administration system:
1. Why are analysts such as Henderson demoralized?
2. How do you explain the motivation level of senior managers? What do you draw upon for your assessment?

3. What recommendations would you offer the Executive Vice President Marshall Wilde?

Session 5. Recruiting and Selecting Employees

Description: In this class, we turn our attention to employee recruitment and selection. Researchers have identified a number of strategies likely to yield fair, valid, and effective hiring decisions. We review these strategies and discuss possible reasons why many companies do not put these strategies into place. We then explore the attraction-selection-attrition cycle and the implications of recruiting and selection for organizational culture and performance. The SG Cowen case provides an opportunity to analyze one company’s MBA recruiting and selection practices; to “select” two of their applicants for hire; and to examine our own beliefs and assumptions about what makes for an effective hire.

Readings:


Case: SG Cowen: New Recruits
1. Who would you hire and why?
2. How will the change in recruiting strategy proposed by Chip Rae affect the nature of the company and its culture?
3. What are SG Cowen’s goals for its recruiting process? Is SG Cowen meeting its goals?

Session 6. Appraising Individual Performance

Description: We continue on the topic of individual performance, introducing dilemmas that managers face with respect to directing, supporting, and evaluating the work of subordinates: balancing implicit rewards (challenging work assignments, recognition) with explicit rewards (pay); weighing incentives for individual achievement vs. incentives for the group or team; and handling performance appraisal in a way that communicates goals and expectations accurately and motivates improved performance. The case focuses on a situation where cross-cultural issues also complicate a manager’s choices on these issues. We will draw on the readings to analyze and understand the tensions that may arise during the performance appraisal process and to discuss approaches that can help deal with those tensions while contributing to the effective management of performance.

Readings:

Case: Karen Leary (A)

1. How would you assess Chung’s performance, and how would you rate Leary’s management of him and the office?

2. If you were Chung, how might you have more effectively managed your relationship with Leary?

3. If you were Leary, how might you have more effectively managed your relationship with Chung?

Session 7. Driving Group Performance

Description: Here we emphasize the power of group norms and information provided by coworkers, subordinates, and bosses as influences on individual behavior. These social influences can, if well-managed, help align group and individual goals with organizational goals, yield higher performance than individuals provide, especially when tasks are complex and demand complementary skills, and build a common language and shared experience base to facilitate coordination and creativity. If poorly managed, however, group norms and information can foster inappropriate conformity and compliance, diminishing individual, team, or organizational effectiveness and integrity. We explore both the potentially positive and the potentially negative consequences of social influence in this class and take a close look at how managers create (and respond to) groups that are “hot”—lively, high-achieving, dedicated groups, usually small, whose members are turned on to an exciting and challenging task.

Reading:

Case: Soul of a New Machine

1. Why is the Eclipse group working so hard?

2. In what ways does West give and receive feedback from his group and the organization?

3. Do you think West’s leadership of the group is successful in the short-run? In the long-run? What are the risks involved in his style?

Session 8. Group Decision-Making in Organizations

Course Paper Due at Beginning of Session

Description: Group influences in organizations can be either positive or negative. In this class, we consider situations in which social influences can pull individuals away from alignment with management’s goals and result in distorted decision-making dominated by unthinking conformity and compliance with group biases. At the same time, we will discuss the assets that groups bring to problem-solving and decision-making and how to leverage those most effectively.
Readings:

In-class exercise: Materials distributed during class

**Session 9. Special Topic: Instructor’s Choice**
**Description:** Each instructor will inform you on Day 1 of the course about the special topic and the plan for this session.

**Session 10. Improving Organizational Processes**
**Description:** We look at the organization of work and the human resource policies associated with the improvement of organizational processes, focusing particularly on “lean” or “flexible” production and the link to quality and productivity outcomes. We teach the Toyota Production System (TPS), emphasizing the “people” side of the production system, e.g. teams, job rotation, training, standardized work. Please note that the OPIM 631 faculty will teach a related case in the next quarter, focusing on operational and logistics aspects of TPS. The integrating theme across these courses is how crucially inter-dependent “people” policies (social system) and operational policies (technical system) are. While TPS arose in a manufacturing context, it is finding applications in many other industries, most recently health care. Our case discussion will focus on one such initiative at a Seattle hospital, allowing us to analyze how and where TPS principles and practices apply best in this setting and where they encounter barriers.

Readings:

Case: Virginia Mason Medical Center
1. What is Gary Kaplan trying to achieve at Virginia Mason?
2. How does the Toyota Production System fit into his strategy?
3. What is your view of the “people are not cars” debate?
4. Is Kaplan’s approach transferable to other hospitals?
Session 11. Creating a High-Performance Culture

Description: Here we explore the sources, and consequences, of a strong, performance-oriented organizational culture. The readings provide definitions and frameworks for thinking about organizational culture and point out how difficult culture change can be. The case, Mary Kay Cosmetics, reveals how a strong performance-oriented culture emerges from the early choices of the firm's founder and is reinforced through the skillful use of ritual and ceremony. We will discuss the ways in which a manager's job involves the creation and shaping of meaning for a firm's employees. We will also consider the transferability of an organization's high-performance culture to settings very different from those in which it arose.

Readings:

Case: Mary Kay Cosmetics Inc.
1. What are the artifacts, the espoused values, and the underlying assumptions of the culture at Mary Kay Cosmetics?
2. How does Mary Kay use ritual and ceremony to create a high-performance culture? What are the strengths and weaknesses of this approach to achieving performance?
3. How readily do you think the organizational culture at Mary Kay could be transferred, as it expands globally?

Session 12. Aligning Human Resources and Business Strategy

Team report from People Express simulation exercise due at beginning of class

Description: In this capstone session, we highlight the alignment (or misalignment) between human resources systems and business strategy as a source of competitive advantage. We also discuss debates over whether there is “one best way” for all companies in all industries to organize their systems for managing people. In the case discussion, we will untangle the factors behind the high performance of Southwest Airlines, perhaps the most successful airline in the U.S. over the past 10-15 years. We will compare Southwest with examples, past and present, of airlines that have taken different approaches to combining their “managing people” practices with their business model and operational practices, and discuss the significance of these differences for achieving sustainable competitive advantage in this very tough industry.

Readings:
Peter Cappelli and Anne Crocker-Hefter, “Distinctive Human Resources Are Firms’ Core Competencies,” Organizational Dynamics, Vol. 24, No. 3.

**Case: Southwest Airways: Using Human Resources for Competitive Advantage**

1. What is Southwest’s strategy? How would it answer the question, “What business are we in?” Why has it been successful for so long?
2. Can its success be replicated by a competitor? Why or why not?
3. How does Southwest’s system for managing people link to the execution of its strategy?
4. How would you describe the culture of the organization?
5. What would cause Southwest to fail?

**FINAL EXAMINATION**
Competitive Strategy (MGMT654)

Course Description

This course focuses on the competitive strategy of the firm, examining issues central to its long- and short-term competitive position. Students act in the roles of key decision-makers or their advisors and solve problems related to the development or maintenance of the competitive advantage of the firm in a given market. The first module of the course develops frameworks that are useful in analyzing a firm’s competitive positioning in the context of its environment. Next, we focus on the development of firm-specific capabilities that contribute to competitive advantage. We then address the economic logic and administrative challenges associated with diversification choices about horizontal and vertical integration.

The goal of the course is for you to develop an analytic tool kit for understanding strategic issues and to enrich your appreciation for the thought processes essential to incisive strategic analysis. We also expect that you will think critically about the tools, understand their strengths and limitations and evaluate the consequences of their use.

The Competitive Strategy Waiver Process

Waiving by Credentials

DEADLINE: See the Introduction to this Waiver Guide.

You may be eligible for a waiver by credential if you have taken a strategy course which covers the following topics: industry analysis, competitive positioning, value chain, diversification, and vertical integration, in the past five years, and for which you received a grade of B+ or better. All petitions must be accompanied by the class syllabus.

Waiving by Exam

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

The waiver exam is a closed-book exam. Answers must reflect an understanding of the strategy literature and strategic management concepts, and not simply tell a story or relate practical business experiences. An exam may be required of individuals seeking a waiver by credentials if there is any concern about student’s grasp of strategic management concepts.

Exam Preparation

There is no Pre-Term preparation course for Competitive Strategy. The sample exam is presented to give you a sense of what the waiver exam will be like; thus there is no solution set included.
Syllabus

Professor Daniel Levinthal  SH-DH 3207
Tel: 215-898-6826  Email: Levinthal@wharton.upenn.edu
Office Hours: By appointment or drop by
WebCafé: http://webcafe.wharton.upenn.edu

Overview
See Course Description on previous page.

Text and Readings
The course readings and cases are collected in a course pack available from Wharton Reprographics on Study.net.
Course Outline

Introduction

Session 1: Introduction and Course Overview

Industry Analysis and Competitive Dynamics

Session 2: Introduction to Positioning


Case: Cola Wars Continue: Coke and Pepsi in 2006

1. Why is the soft drink concentrate industry dominated by two firms? Where can firms in the industry achieve scale economies?

2. Use the 5-Forces framework to explain why the soft drink concentrate industry has been so profitable.

3. Briefly describe how the industry structure has changed in the 1990’s to the present. Can Coke and Pepsi sustain their profits in the U.S. in the wake of the growing popularity of non-carbonated drinks?

Session 3: Complements and the Ecology of Competition


Case: Apple & Google

1. What is Apple’s business model and who are the key players in its value net? What is Google’s business model and who are the key players in its value net? What are the similarities and differences?

2. Where should we expect cooperation and where should we expect competition between Apple and Google?

3. How would Google’s and Apple’s recent strategic moves affect industry structure and profitability?

4. What would be your recommendation to Steve Jobs and Eric Schmidt in order to seize the full value of the strategic opportunity in the mobile market?
Session 4: Strategic interaction


**Case:** *Ryanair: Dogfight over Europe: Ryanair (A)*

1. What is your assessment of Ryanair’s launch strategy?
2. How do you expect Aer Lingus and British Airways (BA) to respond? Why? (Think about what each brings to the party.)
3. Draw the extensive form of the game between Ryanair and the two incumbents. What are the different payoffs to Aer Lingus/BA (treat them collectively as one actor) for different strategic actions? Said differently, how costly would it be for Aer Lingus/BA to retaliate against Ryanair’s launch rather than accommodate it? (It will help to develop, using assumptions where needed, a view on the cost structures of Ryanair vs. Aer Lingus/BA.)

### Positioning

**Session 5: Introduction to Positioning**

**Readings:** P. Ghemawat, “Creating Competitive Advantage,” Chapter 3 in *Strategy and the Business*

**Case:** *Ice-Fili*

1. Examine the detriments of the profitability of the ice cream manufacturing industry in Russia in 2002? What are the key trends influencing the structural drivers of profitability in the industry?
2. Analyze Ice-Fili’s competitive position in the Russian ice cream industry. Does Ice-Fili have a competitive advantage? If yes, is the competitive advantage sustainable? What changes would you recommend to Ice-Fili’s business strategy going forward?

**Session 6: Activity Systems and Positioning**


**Case:** *Revitalizing Dell*

1. What are some of the key choices Dell made in how it competed to distinguish it from its primary competitors in the 1990’s?
2. Prior to the recent efforts by competitors to match Dell (circa 1997), how big was Dell’s competitive advantage? See if you can use the numbers in the case and reasonable estimates to quantify the advantage on a per-PC basis. How has Dell used this advantage in the market? (Think about the customer willingness to pay.)
3. Why was it hard for competitors to respond to the challenge posed by Dell’s competitive advantage in the 1990’s?

4. How can you explain Dell challenges in recent years?

**Session 7: Resources and Firm Capabilities**

**Reading:** Note on Firm Capabilities

**Case:** Nucor at the Crossroads

1. Why has Nucor performed so well in the past?
2. How attractive do the economics of thin-slab casting look? Is thin-slab casting likely to afford Nucor a sustainable competitive advantage in flat-rolled products?
3. How should Nucor think about the uncertainties surrounding thin-slab casting? What should Nucor’s managers do?
4. As a consultant to Iverson, would you recommend entering the flat-rolled sheet market with the new CSP technology?

**Session 8: Positioning and Competitive Advantage**

**Case:** Samsung

1. What are the sources of Samsung’s competitive advantage? Where possible validate your arguments regarding competitive advantage with evidence from the case.
2. What recommendation would you make to Chairman Lee regarding Samsung’s response to the threat of large-scale Chinese entry?

**Corporate Strategy**

**Session 9: Bridging Business Unit Strategy and Corporate Strategy**

**Case:** Sunrise Medical

1. How do Quickie’s and Guardian’s strategies in wheelchairs compare? Does either have a competitive advantage in wheelchairs and, if so, is it sustainable?
2. Should Chandler allow Guardian to introduce a lightweight standard wheelchair? Consider the pros and cons of Quickie participating in this effort.

**Session 10: Corporate Strategy**

Session 11: The Scope of the Firm
Case: The Boundaries of the Magic Kingdom

1. Think about Disney’s choices about horizontal and vertical integration. Analyze the linkages among Disney’s business units: a) To what extent are the business units leveraging common resources? b) Are the linkages among the business units of the type that could not be coordinated using contracts among independent firms? Does the answer to these questions play out differently among different parts of their operations?

2. Consider Disney’s acquisition of the ABC television network (ABC/Capital Cities). From the perspective of the time of the acquisition, do you see an economic logic for the acquisition? Is the logic one of scope economies or vertical integration? To what extent does the logic of vertical integration play out differently in the context of broadcast television versus cable properties (such as ESPN)? Given what we know today, how does your opinion about the value of the acquisition change?

Session 12: Wrap up and conclusions
Global Strategic Management (MGMT655)

Course Description

The course provides future managers with a clear conceptual understanding of:

- The fundamental economic and political factors affecting the international expansion of the firm, as distinct from purely domestic factors.
- The persistence of deep and momentous cross-national differences in the world that affect the strategy, performance, and value of the multinational firm.
- The models for organizing and managing a multinational network of subsidiaries, including how to coordinate and to transfer useful knowledge across borders.
- The sequence and mode of international expansion depending on the characteristics of the industry, the firm, and the host country.

Waiver Process

WAIVER BY CREDENTIAL

DEADLINE: See Introduction to this Waiver Guide.

Very few waivers-by-credential are granted for this course. Waiver by credential is based on evidence of satisfactory completion of relevant coursework at Wharton. University of Pennsylvania courses outside those offered by Wharton or courses at other universities will be considered on a case-by-case basis. Relevant course work must have been completed with a grade of “B+ or better.”

WAIVER BY EXAM

Only in exceptional circumstances will waiver by exam be granted, for instance, when past coursework is somewhat relevant but not entirely so.
Overview

The course provides future managers with a clear conceptual understanding of:

- The influence of firm resources and capabilities on international expansion strategies and foreign location choices.
- The persistence of cross-national differences and the effect of these differences on firm strategies, structures, and performance.
- Models for organizing and managing a multinational network of subsidiaries, including how to coordinate and to transfer knowledge across borders.
- The sequence and modes of international expansion, depending on the characteristics of the industry, the firm, and the host country.
- The emergence of new multinationals.

The Wharton School is the world’s preeminent center for international management research and education. The course intends to demonstrate that decisions affecting the international expansion of the firm are neither obvious nor totally determined by the technological or economic forces generally associated with globalization. Detailed case studies are used to illustrate that the internationalization of the firm is a sequential decision-making process operating at the country, industry, corporate, business, and subsidiary levels of analysis. Firms manage knowledge accumulation and transfer as they grow international through a mixture of planning and trial-and-error. Students will experience in the classroom the most transcendental decisions that multinational firms face in the course of conducting business across borders. The course is unique in that it presents and explains the unexpected ways in which international competition unfolds over time and across countries.

COURSE TAKEAWAYS

- A set of conceptual tools to navigate through the often contradictory and ambiguous mass of information about how international competition takes place.
- An appreciation of the differences between multidomestic and global industries.
- A set of criteria for evaluating exactly which global strategy will help enhance the firm’s long-term profitability and value.
A clear understanding of how to measure and interpret the effects of economic, financial, political, and social factors on international management decisions.

Requirements

- Class participation (25%)
- In-class midterm exam (15%), 15 minutes
- Take-home final exam (60%)

Reading Materials

All readings are available from Study.Net.
Course Outline

Session 1. Introduction to Global Strategic Management


Question: 1. Should DataClear go global? Why or why not?

Session 2. Firm and Industry Frameworks for Global Strategic Management


Questions: 1. What is the global potential of the wine industry?

2. Characterize and evaluate the global strategies of Mondavi’s global competitors.

3. Do you think that Mondavi should compete head-to-head with the Australian wine producers?

Location & Global Strategy

Session 3. Location: Home-Country Effects


1. How do you explain the shifting global leadership in the watch industry, from Swiss to American to Japanese and back to Swiss firms?

2. How do you explain the success of Swatch as a company in this industry?

3. Do you think that Swatch should continue to rely on Switzerland as the location for most of its activities?

Session 4. Location and Distance

Case: The Globalization of CEMEX. HBS 9-701-017

Questions: 1. Is cement a global industry?

2. What accounts for CEMEX’s success to date? In particular, what are the benefits that CEMEX has derived from expanding across borders?
3. How far can Cemex’s competitive advantage travel?
4. Do you think that CEMEX is making the right strategic move in expanding into developed countries?

### Designing Global Organization

**Session 5. Dispersion & Coordination of Activities**


**Case:** Acer Inc.: Taiwan’s Rampaging Dragon. HBS 9-399-010.

**Questions:**
1. Describe Acer’s culture and organizational structure. Can Acer’s early culture and practices be sustained as the company grows?
2. How responsive is Acer to local environments? How coordinated or integrated is it?
3. Analyze the advantages and disadvantages of allowing Acer America to design and market the Aspire.
4. If you were Stan Shih, would you give the Aspire project the green light? Is the organizational structure appropriate?

**Session 6. Strategies and Structures of MNCs**

**IN-CLASS MIDTERM EXAM.**

**Case:** Philips versus Matsushita: A New Century, A New Round. HBS 9-302-049.

**Questions:**
1. How did Philips become a leader in the industry? How did Matsushita overtake Philips? What distinctive capabilities did each firm possess?
2. What are the major problems currently facing each firm?
3. What specific organizational changes would you say each firm should implement?
4. Which company (Philips or Matsushita) would you prefer to run?

**Session 7. Market Entry Strategies**


**Case:** Häagen-Dazs’ Entry into Europe. The Wharton School, 2008.

**Questions:**
1. Why has Häagen-Dazs been so successful in its home country?
2. Why did Häagen-Dazs decide to expand internationally? Did it learn how to succeed globally as it entered new markets?
3. Do you like the second European entry plan of 1993? Why or why not?
Session 8. Sequence and Pace of International Expansion

Reading:  Eleanor Westney, “A Note on Sequential Modes”

Cases:


“Leahy’s lead: A mixture of understatement and quiet confidence has turned Tesco from a domestic grocery chain…”, The Economist, August 11, 2001.


Questions:

1. Do you think there is a good strategic rationale for Wal-Mart &/or Tesco to expand internationally?

2. Explain what you believe to be the rationale for the sequence in which, and the pace at which, Wal-Mart & Tesco have entered different markets.

3. Do you think Tesco’s strategy to enter the United States makes sense?

New Developments in Global Strategic Management

Session 9. Global Innovation


Case:  P&G Japan: The SK-II Globalization Project, HBS 9-303-003

Questions:

1. Would you approve the launch of SK-II as a global brand for P&G?

2. Which of the three market options should Paulo DeCesarre recommend to the GLT? What benefits do you expect to gain? What risks do you see?

3. How should he implement your recommended option? What are the implications for P&G’s new post-O2005 organization? What support and/or resistance do you expect? How will you manage it?

Session 10. Global Open Innovation

Case:  BT Group: Bringing External Technology Inside, ECCH 307-045-1

Questions:

1. How do you compare BT’s technology scouting units with a typical subsidiary in a multinational corporation? What makes their mandate distinctive?

2. What are the main challenges involved in this global technology scouting process?

3. Among the three growth avenues being considered by Frangos, which one would you recommend to him? Why?
Session 11. The Emergence of New Multinationals


Case: Haier: Taking a Chinese Company Global, HBS, 9-706-401

Questions: 1. What do the characteristics of the global large appliances industry tell you about the design of an effective competitive strategy?
2. Was there a good rationale for Haier to make global expansion its top strategic priority?
3. Do you think Haier is right to shun the conventional wisdom by focusing on markets in developed countries before turning to those in developing countries?

Session 12. Conclusion to Global Strategic Management

Course wrap-up and discussion of final take-home exam.
Marketing Management: Program Design (MKTG621)

■ 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 7 years. To waive MKTG 621 altogether, the course must have included decision-oriented case analyses and the student must have earned a grade of A. To substitute MKTG 621 by an upper-level elective marketing course of 0.5 credit units or more, the course need not have included case studies 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

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

Students who earn a grade of A- or better on the waiver exam can waive the course. Students who earn a grade of B or better on the waiver exam can substitute the course by an upper-level elective course of 0.5 credit units or more.
Syllabus

**Overview**

The first-quarter marketing course (MKTG 621) addresses how to design and implement the best combination of marketing efforts to carry out a firm’s strategy in its target markets. The course has two main objectives. First, to develop your understanding of how the firm can benefit from creating and delivering value to its customers and related stakeholders. Second to develop your skills in applying the analytic perspectives, decision tools, and concepts of marketing to the following issues:

1. **Market definition, segmentation, valuation and positioning.** How to: assess market potential, analyze customer behavior, and focus resources on specific customer populations and against specific competitors.
2. **Product 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 (with emphasis on advertising and public relations).

**Skill Development Objectives**

The course uses lectures and cases to help you:

1. Develop a disciplined approach to the *analysis* of marketing situations and decision making;
2. Expand your *decision-making* skills by requiring you to make and defend marketing decisions in the context of stylized real-world problem situations with incomplete information (case studies);
3. Improve your skills in *group problem-solving* and in written and oral *communication* (case write-ups and presentations);
4. Make *cross-functional connections* between marketing and other areas of business.

These skills will serve you in any marketing situation, any geography, and any industry.

**Course Materials**

The MKTG 621 bulkpack with cases is available through Study.Net. WebCafé will be used as the source for class handouts and other materials.

If you seek background reading in the form of a textbook, we recommend one of the following *optional* books:


Course Outline

Class 1: Introduction, Analyzing Markets and Customers (I)
This class discusses the role of marketing in the firm and reviews the “5Cs-SP4Ps” marketing decision process. It focuses on the importance of segmenting the market and creating a clear positioning statement.

Reading Assignment

Class 2: Unilever Brazil Case
(See website for case questions)

Reading Assignment
Marketing Math Essentials: Margin Analysis, and Break-Even Analysis.

Class 3: 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
Marketing Math Essentials: Chain Models of Segment Value, and Customer Lifetime Value (CLV).

Class 4: Gillette Indonesia Case
(See website for case questions)

Class 5: Branding
In this session we examine how brands can affect customer 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.

Class 6: Case Write Up and Presentation: Biopure Corporation
A .doc copy of your write up and, if you are presenting, your .ppt presentation is due in your team folder by 8:00 a.m. Even numbered learning teams will present this case. More details are available at the end of this document.

Class 7: Pricing
Topics covered include: measuring customers’ willingness to pay (economic value to the customer), measuring price sensitivity, and psychological aspects of pricing.

Reading Assignment
Marketing Math Essentials: Economic Value to the Customer.

Class 8: Rohm and Haas Case
(See website for case questions)
**Class 9: Distribution**
This session examines how to design and coordinate distribution channels.

**Class 10: Case Write-Up and Presentation: Natureview Farm**
A .doc copy of your write up and, if you are presenting, your .ppt presentation is due in your team folder by 8:00am. Odd numbered learning teams will present this case. More details are available at the end of this document.

**Class 11: 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.

**Reading Assignment**
*Marketing Math Essentials: Weighted Cost-per-Thousand.*

**Class 12: Tiffany Case**
(See website for case questions)

**Review Sessions: TBA**

**FINAL EXAMINATION**
Marketing Management: Strategy (MKTG622)

Description

Building upon MKTG621, this course focuses on helping you refine skills in developing a marketing strategy and seeing how the marketing tactics need to be in alignment with that strategy. The course 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.

![Product Life Cycle Diagram](image)

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 and learn to apply analytical tools to help formulate effective marketing tactics in each phase of the PLC. These concepts will be further concretized in the context of an in depth marketing strategy simulation that will occur throughout the course.

The Marketing Management: Strategy Waiver Process

Waiver by Credential

**WAIVER BY CREDENTIAL**

*DEADLINE: See Introduction to this Waiver Guide*

Waiver by credentials will be given only to students with an undergraduate course in Marketing that included use of the SABRE simulation or equivalent simulation. A grade of “A” is required for a waiver. A grade of “B” will permit a substitution of a 0.5-credit unit upper-level elective course at the department’s discretion. A grade of “C” or lower indicates waiver by examination only. For MKTG622 the course must have had case studies and analysis as well as included experience with the SABRE or equivalent simulation.

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

EXAM DATE: Waiver and Placement Exam Schedule can be found in the Waiver Exam Guide.

The waiver exam is two hours long.

Exam Preparation

Sample Waiver Exam
You can obtain a copy of the sample exam and the instructions from the department at marketing.dept@wharton.upenn.edu or 215-898-8243/8244.
Syllabus

Professors: Eric T. Bradlow, Robert J. Meyer, Americus Reed II and David J. Reibstein

Overview

See Course Description on page 105.

Outline of Each Class Session

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<tr>
<th>Business Problem</th>
<th>Analytical Thinking</th>
<th>Tool/Framework</th>
<th>SABRE Application</th>
<th>Beyond SABRE</th>
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While the course overall is guided by the product life cycle (PLC) framework, each lecture will consist of the following five elements:

1. **Introduce real world business problem:** We will begin each lecture 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. 1 We will focus on principles, theories, and basic applications of marketing strategy. Discussion and questions are strongly encouraged.

2. **Develop analytical thinking for the problem:** For the business problem being discussed, the class and the instructor will introduce the analyses necessary to resolve these problems, and then make educated decisions, and/or eliminate some alternatives. The hope is to draw some general insights about what the options would be, or what actions should be taken if faced with similar situations in the business world. Equally importantly, we will focus on the process for making such marketing decisions in different contexts.

3. **Identify Tool/Framework to solve the problem:** After framing critical issues and what to think about in order to solve the business problem, we will turn to a tool or framework that helps do so. We will discuss how to implement that tool and how to interpret its results. Many of the tools that will be discussed in this course were created here in the Wharton Marketing department (e.g., conjoint analysis). We will discuss the implementation pros/cons and other key issues related to using the tool.

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1. All of our discussions will be based on the facts described in the case and will pertain to the problems of the company at the time of the case. Any information you might come across about facts of events taking place after the time of the case may lead you astray as to what should have been done during the critical decision period and based on the information that was available at the time.
4. **How the problem manifests in SABRE:** A large-scale computer simulation, SABRE, will occupy a significant part of our time and activity. For this exercise, you will work in your pre-assigned learning teams. This part of the lecture is designed to cover how the business problem manifests itself in SABRE, the simulation environment where you and your learning team will also make actual decisions about a variety of managerial activities related to the business problem. You will also receive market reactions. The simulation is intended to allow you to practice solving the critical business problem being discussed.

5. **The business problem beyond SABRE:** Finally, we will close each lecture with a brief discussion on how the business problem may have nuances that are not necessarily captured in SABRE directly, but that may need to be considered for real-world application of the analytical framework and method.

### Course Materials

All course materials will be available at [www.study.net](http://www.study.net).

### Course Website

Many of the course’s activities (SABRE-related and otherwise) will involve the use of Wharton’s webCafé software, which you can access at: [http://webcafe.wharton.upenn.edu/mktg](http://webcafe.wharton.upenn.edu/mktg).

Please bookmark this website and check it as often as necessary. This site will contain information about SABRE, copies of class handouts, and other general information about the course. If you have any problems accessing it, please send email to webcafe@wharton.upenn.edu.
Course Outline

Session 1:  Motivation and Overview of the Class: SABRE Introduction
Session 2:  Marketing Research I: Diagnostic Analysis
Session 3:  Marketing Research II: Opportunity Analysis
Session 4:  No class – time off for SABRE decisions
Session 5:  Multiproduct Resource Allocation
    Mini In-class Case: TBA
Session 6:  Product Pioneering
Session 7:  Product Launch Decision Making
    Case: Medicines Company. (A)
Session 8:  Marketing in the Maturity Stage—Dynamic Product Management Strategies
Session 9:  Dealing with Competition.
    Case: Canadian Children’s Cereal
Session 10: Marketing in the Decline Stage
Session 11: Marketing in the New Era
Session 12: Case: Marketing Strategy for Future Technologies
Session 13: Concluding Session
FINAL EXAM
Decision Models and Uncertainty (OPIM621)

Course Description

OPIM 621 is a core course in decision models and their application to management problems. Its main topics include linear and integer programming, decision making under uncertainty, and simulation. The emphasis is on models that are widely used in diverse industries and functional areas, including operations, finance, accounting, and marketing.

The applicability and use of decision models have increased dramatically in recent years due to the extraordinary improvements in computer, information, and communication technologies. These developments in hardware and user interfaces, such as spreadsheets, have been complemented by the availability of large volumes of previously unavailable data, such as the automatic capture of point-of-sale information, and easy access to large databases (e.g., Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems.) Personal computers and friendly interfaces have become effective “delivery vehicles” for powerful decision models that were once the exclusive province of experts. Information has come to be recognized as a critical resource, and models play an increasingly critical role in deploying this resource, in organizing and structuring information so that it can be used more productively.

The course has a twofold purpose. First, it seeks to introduce you to simple models and ideas that provide powerful (and often surprising) qualitative insights about a large spectrum of managerial problems. Second, it aims to give you a feeling for the kinds of problems that can be tackled quantitatively, the methods and software available for doing so, and the difficulties involved in gathering the relevant data. Our ultimate ambition is to have an impact on the way you think about the surrounding world — even if you do not explicitly use any mathematical models in the future!

You may find that much of the action in the course has to do with the mechanics of the formulation and solution of simple problems. That is not the purpose of the course, but we believe that it is the best way of accomplishing the above two goals. The simple exercises are complemented by a case assignment that captures more realistically the complexity of managerial problems. We will also provide articles describing successful applications of decision models.

The homework problems you will do are intended to give you practice in developing models and interpreting results. The feedback from these exercises should help you evaluate your progress and understanding. Much of the material builds on topics covered in previous weeks. To keep abreast, it is important that you try to solve these problems on a regular basis.

The textbook by Ragsdale does a good job explaining various concepts with the help of examples. You will be expected to have carefully read the assigned portion of the book prior to coming to class. You are encouraged to discuss this material with classmates or teaching assistants. Most of the class time will be devoted to exploring applications and extensions of the material in the book. Further details about reading assignments are provided in the attached course outline.
The Decision Models and Uncertainty Waiver Process

WAIVING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide

Students requesting a waiver by credentials should have taken a course in operations research or management science that covers linear/integer programming or Monte Carlo simulation for at least a half-semester with a grade of A- or better. The following topics do not suffice: probability and statistics, supply chain management, process analysis, engineering math, calculus, linear algebra, or computer programming.

The decision to grant a waiver by credentials will be made on a case-by-case basis because collegiate courses and programs are extremely varied and may cover some, but not all, of the topics covered by OPIM621. In a situation where collegiate courses or work experience do not clearly demonstrate adequate coverage of the basic material, the student requesting a waiver will be asked to take the waiver examination.

Documenting Your Credentials

In addition to the transcript, a copy of the syllabus for management science and related courses taken should be attached to the waiver form.

WAIVING BY EXAM

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

You are eligible to attempt a waiver by examination if you have done coursework covering these topics:

- Convex optimization, optimal control
- Discrete mathematics, linear algebra
- Theoretical computer science

OR

- If you have work experience involving business applications of LP or Monte Carlo simulation.

The waiver examination is open-book.

Exam Preparation

To prepare for the exam, it would be beneficial to review the OPIM621 course textbook.
Syllabus

Professor Noah Gans (Cohorts G, H, I)
Office: 564 JMHH  Tel: 215-573-7673
Office Hours: Tue 3-4 p.m., Thu 3-4 p.m.
Email: gans@wharton.upenn.edu

Professor Anjani Jain (Cohorts D, E, F)
Office: 300 JMHH  Tel: 215-898-4663
Office Hours: Tue 3-4 p.m., Thu 12-1 p.m.
Email: jaina@wharton.upenn.edu

Professor Sergei Savin (Cohorts A, B, C)
Office: 570 JMHH  Tel: 215-898-1175
Office Hours: Tue 3-4 p.m., Thu 3-4 p.m.
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Professor Nicos Savva (Cohorts K, L, M)
Office: 555 JMHH  Tel: 215-898-8418
Office Hours: Tue 3-4 p.m., Thu 3-4 p.m.
Email: savva@wharton.upenn.edu

Overview

See Course Description on page 139.

Required Texts

Cliff T. Ragsdale, Spreadsheet Modeling and Decision Analysis, Revised 5th Edition, Cincinnati: South-Western College Publishing, 2008, 7 selected chapters. (This is a custom text available at the University Bookstore.)

Computer Software

We will use Microsoft Excel spreadsheets quite extensively throughout the course. In the first half of the course we will also use Excel's Solver add-in to solve constrained optimization problems, and in the second part of the course, we will use the add-in, Crystal Ball, which facilitates Monte Carlo simulation. You will be able to download Crystal Ball via webCafé.

We will also place several data and program files on the course website. Details of these files will be provided in the notes to be handed out in class.
## Course Outline

In the detailed course outline that follows, the readings marked Text–*m*; *ppp–qqq* refer to Chapter *m*, pages *ppp–qqq* of the Ragsdale text. In several classes, you are to prepare short cases that will be distributed in class; these cases will also be available on the course web site, along with other related articles.

<table>
<thead>
<tr>
<th>Session</th>
<th>Topics</th>
<th>Read Before Class</th>
<th>Submit</th>
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</thead>
</table>
| 1       | • Decisions & models  
         | • LP Introduction | Text–1; 1-13: Introduction to modeling. Skim through the brief sketches of management science applications.  
         |                    | Text–2; 17-39: Go through the graphical solution method carefully; the geometric intuition you develop now will serve you well in the coming weeks. |
| 2       | • Geometry of linear programs and graphical solution of LPs  
         | • Fabulous Nuts problem  
         | • LP sensitivity analysis | Text–3; 45-62: A systematic explanation of how to formulate an LP and then implement the formulation in a spreadsheet.  
         |                    | Text–4; 136-151: Sensitivity analysis is used to address a large range of managerial questions  
         |                    | Lecture Notes from Class #1: Fabulous Nuts: We’ll discuss this problem in class. |
| 3       | • LP formulations: applications to production, transportation, and multi-period planning. | Text–3; 63-102: Starting with today’s class, we will cover a number of examples to illustrate LP applications in a variety of managerial problems.  
         |                    | Lecture Notes from Class #2: GlobChem: We’ll discuss this problem in class. |
| 4       | • LP formulations: applications to investment planning and term-structure analysis. | Lecture Notes from Class #3: Real Estate Development Investment: Please come prepared to discuss the case described at the end of Lecture Notes for Class 3. |
| 5       | • Integer programming  
         | • Plant location  
         | • Currency Arbitrage | Text–6; 232-262: Skim pp. 232-239. Concentrate on pp. 240-262. We will focus primarily on binary variables and go through additional examples in class. |
| 6       | • Assignment problem  
         | • Search engine advertising  
         | • Review of LP&IP | Lecture Notes from Class #5: Assignment Problem: We’ll discuss this problem in class. |
| 7       | • Introduction to simulation | Text–12; 559–586: A brief introduction to risk analysis. |

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**Decision Models and Uncertainty (OPIM621) COURSE OUTLINE ■ 106**
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<th>Session</th>
<th>Topics</th>
<th>Read Before Class</th>
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<tr>
<td>8</td>
<td>Applications of simulation:</td>
<td><strong>Text-12; 559–586</strong>: Read again carefully to make sure you understand the technical concepts.</td>
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<tr>
<td></td>
<td>evaluating financial options</td>
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<tr>
<td>9</td>
<td>Applications of simulation:</td>
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<td></td>
<td>investment portfolio</td>
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<td>10</td>
<td>ODI Case discussion</td>
<td><strong>Offshore Drilling Incorporated.</strong> Read the ODI case and prepare a write-up. We will discuss the case in class.</td>
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<tr>
<td>11</td>
<td>Instructor’s Choice</td>
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<td>HW #4</td>
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<td>12</td>
<td>Applications of simulation:</td>
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<tr>
<td></td>
<td>Course wrap-up</td>
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</tbody>
</table>
Operations Management: Quality and Productivity (OPIM631)

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 OPIM631, the emphasis is on the design of business processes to maximize supply and to achieve world-class quality. The first part of the course details different kinds of business processes and explains how to measure key process parameters like capacity and lead time. The second part of the course focuses on process improvement and examines classic ideas in quality management as well as recent ideas about restructuring processes to optimize output for a given set of limited resources.

The OPIM631 Waiver Process

Waiving by Credentials

DEADLINE: See Introduction to this Waiver Guide

OPIM631 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 OPIM631 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

Syllabus

■ Overview

See Course Description on previous page.

■ Course Text, Readings and Handouts

The following required course material is available for purchase at the Penn Bookstore on the corner of 36th and Walnut Streets or from any online retailer. (Do NOT go to Wharton Reprographics.)


The cases are available at www.study.net.

Other materials, such as exercises, copies of key overheads, readings and other notes of interest will be distributed in class during the course and/or available for download in webCafé.
Course Outline

Class Session Descriptions

Session 1: Introduction
Reading: Text, Chapters 1-2

Session 2: Process Flow Analysis
The Toshiba case illustrates a classic assembly line operation. We use the case to reinforce several of the key concepts and terms in process flow analysis.

Reading: Text, Chapter 3: 3.1-3.4 and Chapter 4
Case: Toshiba: Ome Works (HBS, 9-696-059)

Case Preparation Questions:
1. What are the key elements of Toshiba’s business strategy in notebook computers? In what way do Ome’s operations support this strategy?
2. What is Toshiba doing to achieve high performance on cost, quality and flexibility?
3. Assuming the assembly line prototype is implemented as shown in Exhibit 1, calculate the following quantities:
   a. Process Capacity
   b. The maximum number of computers that can be produced in a 7.5 hour shift.
   c. Direct Labor Content per notebook computer (i.e., the amount of time a worker actually works on a computer while it is on the assembly line).
   d. Direct Labor Idle Time per notebook computer assembled (i.e., the amount of time workers are idle per computer assembled).
   e. Inventory on the assembly line.
   f. Flow Time for a notebook computer.

Note that Station 9 is somewhat more complex than the others. Two facts are important: (1) software loading does not require an operator (it’s like waiting for your computer to start up) and (2) Station 9 occupies three “spaces” on the line. Because the conveyor belt moves continuously, a given computer therefore spends three times as long in Station 9 as in the other stations. The worker for Station 9 moves as needed among the three computers within Station 9 to perform the tasks requiring an operator.

Session 3: The Operations—Finance Link
We talk about the link between operations management and finance. Two topics will be emphasized. First, we will talk about inventory turns and other aspects of working capital management. Second, we will outline the link between financial performance metrics and operational decisions using the case of a small furniture company.

Reading: Text, Chapter 5: 5.1-5.3
Session 4: Batching / Lean exercise
In the first part of the session, we will do a hands-on simulation exercise of a manufacturing environment. In the second part of the session, we discuss the impact of set-up times on capacity and inventory levels.

Reading: Text, Chapter 6: 6.1-6.3
Exercise: Please follow the instructions provided by your professor.

Session 5: Lean Operations in Services
In this class, we apply the ideas and concepts derived in production settings to the service industry.

Case: Loan Processing at Capital One (Wharton)

Case Preparation: What needs to be done in the consumer loan processing organization to meet the new business needs?

Session 6: Working with Multiple Flow Units / Review of Part 1
In this session, we review the tools and framework discussed in class up to know.

Reading: Text, Chapter 3: 3.5-3.6

Session 7: Managing Variability: Waiting time problems
This lecture will introduce queuing formulas needed for the next class.

Reading: Text, Chapter 7 (except 7.3)

Session 8: Managing Variability: Waiting time problems
The Beau Ties case will allow us to apply the tools of variability management for the analysis of a call center. Check out www.beautiesltd.com/ for more details about the company’s product line.

When answering the questions, please note the following: (a) use coefficients of variation equal to 1 for both arrival and service processes (b) The numbers in Exhibit 5 reflect call volumes for the corresponding time slots cumulated over a period of two months. E.g. the 18 calls in the Monday 7-8 time slot come from eight different Mondays in March and April. Divide the numbers by 8 to get daily volumes!

Case: Beau Ties Limited of Vermont (UVA-OM-0836)

Case Preparation Questions:
1. Assuming that Kenerson’s has a target of an average wait of less than 1 minute, develop a telephone staffing plan for December 4, 1995 assuming that the distribution of phone calls throughout the day follows the hourly distribution in Exhibit 5.

2. How will your December 4, 1995 plan change if the target is an average wait of less than 30 seconds?
3. Compare the variable costs of the staffing plans from questions 1 and 2 with the charges from AIDC.

4. How should Kenerson evaluate the decision to bring the telephone order-entry system in-house?

For the questions above, we strongly encourage you to build a spreadsheet model in Excel, rather than doing the analysis “by hand”.

**Session 9: Managing Variability: Throughput Losses**

**Reading:** Text, Chapter 8

**Session 10: Toyota Production System**

We use the Toyota to illustrate the Toyota Production System (TPS). We also discuss a specific problem at the Georgetown, Kentucky plant. This session serves to link the material on process analysis with the material on process improvement.

**Reading:** Text, Chapter 10

**Case:** Toyota Motor Manufacturing (9-693-019)

**Case Preparation Questions:**

1. How does the andon procedure work and what are its fundamental aspects? How much does it cost to stop the line? What are the benefits of stopping the line?

2. What are the underlying causes of the problems facing Doug Friesen?

3. How, if at all, does the current routine for handling defective seats deviate from the principles of the Toyota Production System?

4. As Doug Friesen, what would you do to address the seat problem? Where would you focus your attention and solution efforts? What options exist? What would you recommend? Why?

**Session 11: Quality Management, Six Sigma**

This lecture will introduce the methodology of statistical process control as well as the concept of six sigma.

**Reading:** Text, Chapter 9: 9.1-9.6

**Session 12: Review Part 2, Exam Preparation**

This session concludes and reviews the course material. We will work through a mock-up exam to help you get ready for the final.
Operations Management: Supply Chain Management (OPIM632)

Course Description

Matching supply with demand is an important challenge for firms: excess supply can lead to costly inventory write-offs, while inadequate supply irritates customers and results in lost revenue. In this course we will explore how firms can organize their operations so that they more effectively align their supply with the demand for their products and services. Our aim is to provide both tactical knowledge and high-level insights needed by general managers and management consultants. We will describe how companies have used the principles from this course to significantly enhance their competitiveness.

Our emphasis is on managing uncertain demand, both within the firm and across the supply chain. We demonstrate that matching supply to demand is easiest when a firm has a flexible supply process, but flexibility is generally expensive. In this course we will learn (1) how to assess the appropriate level of supply flexibility for a given industry and (2) explore strategies for economically increasing a firm’s supply flexibility. When supply is not flexible, we will learn how to manage demand to better match it to our fixed supply.

The OPIM632 Waiver Process

The OPIM632 faculty encourages only those students who have recently completed substantial course-work in operations management and particularly in supply chain management to waive OPIM632. The general rule is that the student has to take the waiver exam to waive the course.

WAIVING BY CREDENTIALS

DEADLINE: See Introduction to this Waiver Guide

The students who are granted waivers-by-credential possess an extensive background in supply chain management, such as an undergraduate/graduate degree in operations research/industrial engineering/management science including substantial coursework in supply chain management and exposure to both models and case studies. Work experience in supply chain management alone is not sufficient to grant the waiver. The analogy is that of a CPA waiving accounting by credentials. All applications for waiver by credentials should be accompanied by a copy of your grade transcript and complete course outline(s) indicating assignments, name of text/readings used and other details. Related course-work should not be dated more than five years old and students should earn at least a grade of “A-” in corresponding courses.
WAIVING BY EXAM

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

Be aware that the waiver exam, like OPIM632, focuses both on quantitative models necessary to analyze supply chains and on qualitative concepts related to supply chain management. Students who are able to pass the waiver exam tend to share the following characteristics:

1. They have had courses in statistics and supply chain management within the past two or three years;

2. They are well-versed in statistical forecasting models, single-period and multi-period stochastic inventory management models and in models related to yield/revenue management to match supply with demand;

3. They understand strategies necessary to achieve supply chain flexibility and coordination among multiple parties within the supply chain. In particular, they have been exposed to practical aspects of make-to-order and make-to-stock strategies, mass-customization, variety postponement and quick response.

The waiver examination itself is open-book. You are also permitted to bring a non-programmable calculator to the waiver exam.

Exam Preparation

This course covers Chapter 11 through 16 from the course book Matching Supply with Demand by Cachon and Terwiesch, Second Edition.
Syllabus

Overview

See Course Description on page 125..

Course Text, Readings and Handouts

The following required course material is available for purchase at the Penn Bookstore on the corner of 36th and Walnut Streets. This is the same book you used in OPIM631.


Cases are made available through www.study.net. In addition, exercises, copies of key overheads, readings and other notes of interest will be distributed in class during the course (and available for download on the course website).
# Course Outline

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<td>Text: Statistics Tutorial, Appendix A</td>
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<td>Text: Chapter 11, sections 5-8</td>
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<td>Case: Le Club Français du Vin</td>
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<td>3</td>
<td>Mass customization, outsourcing and make-to-order</td>
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<td>Case: Timbuk2</td>
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<td>Text: Chapter 12, sections 0-4 (up to Limited Capacity)</td>
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<td>4</td>
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<td>Pre-reading: Beer game rules</td>
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<td>10</td>
<td>Contracting and Coordination in Supply Chains</td>
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<td></td>
<td>Discussion material: Will be posted on webCafé</td>
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<td>Text: Chapter 16</td>
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<td>Case: Zara</td>
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<td>Discussion material: Will be posted on webCafé</td>
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<tr>
<td>12</td>
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<td>#3</td>
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<td>Final Exam</td>
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Class Session Descriptions

Session 1: Introduction
This session will cover the course syllabus and introduce the newsvendor model.

Reading: Text, Chapter 11: sections 0 – 4.

Text: Appendix A

Preparation:
1. Read Chapter 11 (sections 0 to 4) carefully.
2. IMPORTANT: Appendix A contains a tutorial on the statistics needed for this course. You should at least skim through these pages to determine if you are comfortable with this material, and if not, you should read through this tutorial carefully.

Session 2: The Newsvendor Model
This session explores the challenges of procurement for a wine catalog retailer.

Reading: Text, Chapter 11: sections 5-8.

Case: Forecasting and Procurement at Le Club Français du Vin (Wharton case)

Case preparation:
1. Consider a 10 Euro (retail price) bottle. What are the costs of having one bottle too few in inventory (underage cost)? What are the costs of having one bottle too many in inventory (overage cost)? List these costs qualitatively and attempt to attach numbers to them.
2. Assume the underage cost is 3 Euro and the overage cost is 1 Euro. How many bottles would you order of a wine that is forecasted to sell 2000 bottles if your objective is to maximize profits? How do these numbers change if you use the cost numbers from your answer to Question 1?
3. On the OPIM 632 webCafé there is an Excel file that contains data from Exhibit 2 in the case. How much of each wine listed in Exhibit 2 would you order? Be prepared to explain and justify your decisions.

Session 3: Mass Customization, Outsourcing and Make-to-order
Mass customization offers an infinite variety of goods that are customized to a consumer’s exact specifications. This session explores the pros and cons of this strategy and also discusses issues involved in outsourcing of manufacturing operations to low-cost countries.

Reading: Text, Chapter 12: sections 0-3.

Case preparation:
1. What channels does Timbuk2 sell through and which one is the most profitable?

2. How should Timbuk2 go about deciding which mass-customization options to offer customers? Brennan talks about a very vague process based on management intuition. For instance, discuss the analysis for a decision by Timbuk2 on whether to allow customers to choose a different buckle? Timbuk2 currently offers a choice of colors for the three panels — how do you think costs would change if customers also were allowed to choose the dimensions of the panels?

3. What are the costs and benefits of moving production to China? Should Timbuk2 produce in more than one location (e.g., San Francisco and China at the same time)? If so, what are the issues? In particular, think about utilization of San Francisco factory before and after outsourcing as well as about inventory needs.

Session 4: The Order Up-To Model
This session studies service levels and lead times in a supply chain. Unlike with the newsvendor model, we now consider a supply chain that has demand over a long time horizon, so multiple replenishments are possible.

Assignment: Assignment #1 is due at the beginning of class.

Reading: Text, Chapter 13

Preparation: Read chapter 13 carefully. The session will be primarily a lecture on the mechanics of the model and the qualitative implications of the model.

Session 5: Supply Lead Times and Postponement
Postponement is a strategy to redesign a product and its supply chain to increase supply flexibility.

Case: Hewlett-Packard: DeskJet Printer Supply Chain A and B (Stanford case)

Case preparation:
1. What are the pros and cons of the following proposals mentioned in the A case: a European factory, better forecasting, more inventory.

2. Assess quantitatively the air freight option relative to current operations. Just consider the products for the European market. Do not forget to consider pipeline inventory (since HP owns the pipeline inventory from Vancouver to Europe). Use the following assumptions:
   a. HP wants to minimize inventory while still achieving at least a 98% in-stock probability.
   b. The lead time from Vancouver to Europe is 5 weeks by the current method (ocean) but 1 week by air.
   c. HP orders and received inventory on a weekly basis.
   d. There are 4.33 weeks per month and demand is independent across time.
   e. The product sells for $450 and marginal production cost is $300.
f. Inventory carrying costs are 24% per year.
g. Shipping via sea (the current operation) costs $10 per printer, whereas airfreight costs $25 per printer.

3. Evaluate quantitatively the proposal in the B case for the European market.
4. Will the B case proposal be effective in the other major markets, North America and Asia?
5. Would you support the B case proposal? If so, why? If not, why?

Session 6: Managing Risk in Operations
This session explores several operations strategies for reducing and hedging uncertainty.

Reading: Text, Chapter 14
Preparation: Read the text chapter.

Session 7: Internet Distribution
Internet retailing requires less inventory and retail space than brick-and-mortar retailing. But Internet retailing introduces additional costs. We shall compare these two models from an operations perspective.

Case: Online Book Retailing: Operational Strategies (Wharton Case).

Case preparation:
1. What operational advantages and disadvantages does Amazon have relative to B&N’s superstores?
2. Compare costs at B&N with Amazon using data in the case (Excel file is provided on webCafé). Does Amazon’s operational advantage outweigh its operational disadvantage? Discuss the source of cost advantage/disadvantage for every item of financial data in Exhibit 2.
3. Consider the same analysis for B&N.com versus Amazon.com. Did B&N.com benefit from its parent brick-and-mortar company and why?
4. What do you think of Amazon’s prospects going forward?

Session 8: Yield Management
This session studies several yield management tools to increase revenue in the presence of fixed capacity and variable demand.

Assignments: Assignment #2 is due at the beginning of class.

Reading: Text, Chapter 15
Preparation: Read the text chapter.
Session 9: Behavior in Supply Chains: Computerized Root Beer Game
This session introduces and focuses on the concept coordination between different firms within a supply chain.

Reading: Please login into the Root Beer Game and read information on the “Prepare” tab to familiarize yourself with the game and to make sure that your laptop is compatible. Be sure to watch the “how to play” movie.

Session 10: Contracting and Coordination in Supply Chains
This session continues our discussion on supply chain coordination, with wrap-up of the Beer Game and then with discussion of contractual agreements existing between different firms.

Reading: Text, Chapter 16.
Reading material and discussion questions posted on course web site.

Session 11: Supply Chain Innovation
In this session we will discuss how a company can revolutionize an otherwise mature industry not by changing products but by changing its supply chain structure.

Case: Marks & Spencer and Zara: Process Competition in the textile apparel industry (INSEAD case)

Case preparation:
1. Compare Zara and Marks & Spencer: how do they differ in product offering?
2. How do two companies differ in design, sourcing, distribution and retailing?
3. Which of the two companies faces higher demand uncertainty, cost of underage and cost of overage? Are their choices of inventory levels consistent with these parameters?
4. What do you think about issues that Zara is likely to face if it continues with the global expansion?

Session 12: Summary and Review
This session concludes and reviews the course material.

Assignments: Assignment #3 is due at the beginning of class.

Preparation: No preparation is required for this session.
Statistical Analysis for Management (STAT621)

Course Description

This course develops 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 Waiver Process

The Statistics Department encourages only those students who have recently completed substantial work in statistics to waive STAT621. For data on the percentage of last year’s entering class who waived STAT621, 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 during 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 STAT621 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 STAT621, focuses upon the interpretation and critique of statistical results with most of the calculation left to the computer. For example, the waiver exam questions the violation of assumptions that underlie regression coefficient from a small sample of data. 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.

Exam Preparation

There is a pre-term waiver preparation course (STAT608) to help you prepare for the exam. The pre-term course presents a rapid review of the material covered in the waiver exam. Virtually all students who passed the STAT621 waiver exam last year had taken STAT608. We have included last year’s waiver exam and its solution set (see below).

Important Note: Incoming students who do not meet points 1 through 4 above should note that the Statistics Department strongly discourages using STAT608 as a “crash course” to pass the waiver exam. A solid grounding in statistics will be expected in the remainder of your courses at Wharton. Passing the exam without that solid background will only cause you academic difficulties later.
Syllabus

Source Material

REQUIRED

- Class Notes. A complete, half-size copy of these notes can be purchased through Study.net beginning Friday, September 3. These can also be downloaded directly from the 621 webCafé e-room.
- SAS Institute, JMP 8, downloadable from upenn.onthehub.com.

RECOMMENDED

- Stine and Foster, Statistics for Business, Addison Wesley.

OPTIONAL (on reserve at Lippincott Library)


The fundamental material for the class is contained in the Class Notes which will be discussed and elaborated in the class lectures. A good deal (but not all) of the Class Notes is also elaborated in the Stine and Foster (SF) textbook. Indications for the relevant readings in SF are included 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 a basically an example rich guide to statistical analysis with JMP. FPP is a highly verbal and conceptual book — an excellent introduction both for “poets” who are unfamiliar with technical readings and for “quant jocks” who would like a better sense of the reasoning process of statistics. K is the traditional “reference manual” and explains details of statistical procedures that are not covered in class.

JMP is the computer package we’ll use to for statistical calculations and graphics. Those who took Stat 603 in pre-term will be familiar with the package. It will be employed considerably in Stat 621. In particular, an essential component of 621 entails project work that will require 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.
**Course Overview**

In this course, you will learn the fundamental statistical methods of regression analysis. 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.

The Class Notes are organized into modules which will be covered in order.

- **Module 0:** Getting Started
- **Module 1:** Fitting Equations to Data
- **Module 2:** The Simple Regression Model (SRM)
- **Module 3:** Inference in Simple Regression
- **Module 4:** The Multiple Regression Model (MRM)
- **Module 5:** Comparative Analysis of Groups Using Regression
- **Module 6:** Model Building
- **Module 7:** Time Series Modeling
Course Outline

Session 1. Fitting equations to data
Session 2. Assumptions in regression modeling
Session 3. Prediction and confidence intervals in regression
Session 4. The multiple regression equation
Session 5. Collinearity in multiple regression
Session 6. Incorporating categorical variables with two levels; dummy variables
Session 7. Incorporating categorical variables with many levels; model validation
Session 8. Summary of regression analysis

Experimentation and Analysis of Variance

Session 9. Comparing many means
Session 10. Analysis of variance with two factors

Logistic Regression

Session 11. Modeling with a categorical response variable

Time Series

Session 12. Regression and experiments with data gathered over time

Session Preparation

BEFORE SESSION 2:

Hildebrand and Ott (H&O): Read sections 11.1, 11.2, 13.4, and 13.6; focus on interpretation issues, not computation
Coursepack: Read “A simple simple regression” and “Leverage and influence”
Casebook: Read studies on the ideal regression model, efficiency of cleaning crews, housing prices and crime rates, and predicting cellular phone use
Optional: Freedman, Pisani, and Purves (FPP): Read Chapters 10, 11, and 12. FPP’s Chapter 7 is a very basic intro to plots and lines

Learning teams begin analysis of data for Assignment A1
BEFORE SESSION 3:

H&O: Read sections 11.1-11.5

Casebook: Read studies on housing construction and liquor sales and display space

Optional: FPP has a very basic introduction to regression and correlation in Chapters 8-12. It may be useful if you have basic difficulty with the concepts. Ignore the idea of an SD line; that’s one time when FPP tried something that didn’t work.

Learning teams complete Assignment A1, due at Session 3

BEFORE SESSION 4:

H&O: Read sections 12.1-12.3, 12.5

Coursepack: Read “Reading a multiple regression equation”

Casebook: Read study on automobile design

Individuals acquire data for Assignment A2, due at Session 7

BEFORE SESSION 5:

H&O: Read sections 12.3, 12.4, 13.1

Casebook: Read studies on stock prices and market indices, and parcel handling

Individuals begin analysis for Assignment A2 and obtain individual project data

BEFORE SESSION 6:

H&O: Read sections 13.2, 13.4, and 13.6

Coursepack: Read “Validating a regression model”

Casebook: Read study on employee performance

Complete analysis for Assignment A2 and draft responses; begin individual project analysis

BEFORE SESSION 7:

H&O: Read sections 12.4, 13.2, 13.4, 13.6

Coursepack: Read “A multiple regression of house prices”

Casebook: Read studies on wage discrimination and timing production runs

Revise and complete responses for Assignment A2, due at Session 7
BEFORE SESSION 8:
H&O: Review Chapter 13
Casebook: Read studies on executive compensation and using stepwise regression for prediction
Coursepack: Read “A project report example”
Continue analysis of individual project data

BEFORE SESSION 9:
H&O: Read sections 9.1, 10.1, 10.3; briefly read sections 9.2 and 10.2; focus on interpretation, ignoring computational details
Casebook: Read studies on selecting the best vendor, headache pain relief, and tests for linearity
Draft a report for the individual project

BEFORE SESSION 10:
H&O: Read sections 10.4 and 10.5
Casebook: Read studies on package design and evaluating employee time schedules
Revise report for the individual project
Teams begin analysis for Assignment A3

BEFORE SESSION 11:
Casebook: Read studies on the Challenger disaster and marketing orange juice
Individual project due
Teams carry out analysis for Assignment A3

BEFORE SESSION 12:
H&O: Read sections 13.3, 13.7
Casebook: Read studies on predicting cellular phone use and computer sales
Teams complete report for Assignment A3, due at Session 12