

Analytics 1 – Summer 2024

Sections 1 and 3

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Sections 2 and 4

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Course Content and Objectives

This two-course sequence introduces analytic methods for modeling decision problems, understanding data, and using models and data to make wise decisions. Analytics 1 begins by studying probability and decision-making under uncertainty. We then discuss spreadsheet modeling and optimization. We conclude with an introduction to data visualization. We illustrate these analytic methods in a variety of managerial settings (including marketing, operations, and finance) and in a variety of industries. The course will emphasize hands-on experience with Excel, with Excel add-ins, and will introduce Tableau for data visualization.

The objectives of this course are (i) to help you become skilled at applying some common analytics techniques, (ii) to help you learn to be an intelligent consumer of data and analytics-based reports in business settings, and (iii) to encourage a more disciplined thinking process in the way you approach decision problems and use data. The goal is to help you become more competent and confident in understanding and using data and in creating analytical models for decision-making, both for other courses at Tuck and on the job.

Readings

The assigned readings will be drawn from the following texts:

- "Decision Making Under Uncertainty" from Practical Management Science: Spreadsheet Modeling and Applications by Wayne Winston and Christian Albright.
- "Principles of Probability" from *Applied Statistics for Business and Economics: An Essentials Version*, 3rd edition, by Allen Webster.
- Business Analytics: The Art of Modeling with Spreadsheets, 5th edition, by Stephen Powell and Kenneth Baker.
- "Introduction to Optimization Modeling" from *Business Analytics: Data Analysis and Decision Making*, 7th edition, by Christian Albright and Wayne Winston.

You will be able to "search" these and other course materials using TuckBOT in Canvas.

Course Requirements

Homework assignments are listed in the day-by-day class schedule below. Assignments and instructions will be available in Canvas. All homework assignments should be uploaded to Canvas by 6:00am before the class session on the due date. Please follow the submission instructions in Canvas; some assignments will be submitted as Excel spreadsheets, while others should be PDFs or PowerPoint presentations.

There will be two exams in this course:

- Exam A: Saturday, Sept. 7, from 9 am to noon. It will cover Classes 1 to 6.
- Exam B: Saturday, Oct. 5, from 9 am to noon. It will cover Classes 7 to 16.

Grading

In calculating your final grade, the components of the class will be weighted as follows to determine an overall score:

Exam A: 30%
 Exam B: 40%
 Homework: 20%
 Participation: 10%

Your final grade will be assigned according to this score, following Tuck guidelines for core classes.

TA and Review Sessions (Optional)

Sessions with second-year teaching assistants (TAs) will be held from 6 to 7:30 pm the day before each class (except class 1). During these sessions, the TAs will be available to answer general questions about the course and assist with homework exercises, usually those due the next day. All TA sessions are optional. No new material will be introduced, and you should not feel obligated to attend if you do not feel the need. These sessions will be held in person and on Zoom (details to be added).

There will also be the following optional review sessions (Zoom only) before the exams:

- Exam A review session: Friday, Sept. 6, 1:15 to 2:45 pm.
- Exam B review session: Friday, Oct. 4, 3:15 to 4:45 pm.

Studying for the Course

The textbook chapters are easy to read and cover a lot of material. However, some of the topics are not covered in depth. Class discussions, handouts, and other references will fill these gaps. We expect you to read the assigned chapters and familiarize yourself with the content before class. The class discussion will aim to provide a good understanding of the concepts and their application.

Canvas Preparation, Quizzes, and Review

Some classes will be preceded by a custom set of videos and quizzes available on Canvas. The objective of the videos is for students to learn and apply analytics concepts or review class material. The idea is to use classroom time for more value-added learning. Completing these quizzes will count toward your class participation grade.

Software

The course begins with Excel and an Excel Add-in, TreePlan. After Exam A, we will introduce three

additional Excel Add-ins: *Solver, Sensit*, and *Solver Sensitivity*. Excel and all these add-ins are available for both Windows and Mac as well as on <u>Tuck's virtual desktop</u>. Towards the end of the course, we will work with *Tableau*. We will provide documentation and videos with instructions on using these software packages.

Attendance

The Tuck educational experience is co-produced by students and instructors. Your preparation, presence, and active participation are important for its success. In Analytics, attendance is an important part of the class participation grade.

If you must miss a class (e.g., for illness or a family emergency), please report your absence using the absence tool in Tuck's Session Master: https://session-master.tuck.dartmouth.edu/planned-absence. The tool will ask you for the date and reason for your absence. In accordance with Tuck's Honor Principle, you are expected to provide forthright, timely, complete, and accurate information about why you need to miss class. If you miss a class, you are responsible for knowing the material covered in that class. It is Tuck's policy that missing a class for recruiting activities is not considered an excused absence.

Laptop Policy

We will follow Tuck's laptop policy in this class: students shall not use laptop computers, cellular telephones, or any other electronic communication device in any class session unless the instructor grants explicit permission to do so. When laptops are needed for class, faculty will notify students.

Honor Principle

The Tuck Honor Principle represents a contract among students and instructors about appropriate behaviors in the learning process. This course is structured to promote learning through individual and team assignments. This structure encourages certain group interactions because they enable you to use time efficiently or improve your understanding of the material.

Group Assignments. To prepare group assignments, we encourage collaboration among the entire study team. Your group as a whole will be expected to present the group's analysis in class (if called upon). All group members should be comfortable discussing the results in class.

Individual Assignments. Your individual assignment submissions must be your own work. You may consult with your study team members about the material covered in the assignment, but you must generate the homework submission independently, without copying materials (e.g., Excel files or writeups) from others. You are expected to understand all aspects of your submitted work and may be called upon to explain your work in class.

Exams. Both exams are open-book, open-notes (yours only), and require individual work without help from other students, the internet, or anybody other than the instructors.

ChatGPT. ChatGPT and other large-language-model-based chatbots present new opportunities for both students and instructors. Our policy for this course is that students *may* consult ChatGPT when completing homework assignments (individual or group assignments) but *may not* consult ChatGPT (or similar tools) on exams. If you consult ChatGPT (or other similar tools) for homework assignments, you are still responsible for the work: you must be able to explain your answers (e.g., if called upon in class) and you will lose points if/when ChatGPT makes errors.

Outside Help and Materials. Conversations with second-year students other than the TAs about specific assignments before their due dates are a violation of the Honor Principle. Also, please note that it is a

violation of the Honor Principle to use any course materials, such as homework assignments, exams, etc., from previous versions of this course (or other sources) unless the instructors provide them to you. Finally, course materials may not be shared with people other than your classmates without your instructor's permission.

If situations arise where the application of the Honor Principle is unclear, you should seek clarification from your instructor.

Course Schedule

Class/Date		Торіс	Assignments (all homework assignments are individual assignments, except where noted)	
1.	8/21 Weds.	Introduction, Decision Trees	Reading: Start Winston & Albright, pp. 391-430 Homework: Pre-Course Survey; River Vision	
2.	8/22 Thurs.	Sensitivity Analysis	Reading: Continue Winston & Albright, pp. 391-430 Homework: Zephtrix	
3.	8/26 Mon.	Probability and Biases, Value of Perfect Information	Reading: Webster, Chapter 4, pp. 75-89 Homework: Vivia	
4.	8/28 Weds.	Bayes' Theorem Value of Information	Reading: Winston & Albright, pp. 430-441, Webster, Chapter 4, pp. 90-99 Homework: Probability and EVPI	
5.	8/30 Fri.	Utility Theory, Decision Heuristics	Reading: Winston & Albright, pp. 441-455 Homework: Cobalt	
6.	9/4 Weds.	Summary Statistics and Simulation	Homework: Gillette vs Energizer (<i>Team Assignment</i>)	
	9/6 Fri.	Exam A Review Session	1:15 to 2:45 pm	
	9/7 Sat.	Exam A	9 am to noon	
7.	9/11 Weds.	Spreadsheet Engineering	Reading: Powell & Baker, Chapters 1 and 3 Homework: Reid's Raisins	
8.	9/12 Thurs.	Problem Structuring	Reading: Powell & Baker, Chapters 2.1-2.3 Homework: Influence Diagram Exercises	
9.	9/16 Mon.	Spreadsheet Analysis	Reading: Powell & Baker, Chapter 4 Homework: Reid's Raisins Sensitivity	
10.	9/18 Weds.	Introduction to Optimization	Reading: Albright & Winston, Chapters 13.1-13.3 Homework: Strava (<i>Team Assignment</i>)	
11.	9/19 Thurs.	Optimization Examples	Homework: Valu-Com	
12.	9/23 Mon.	Optimization and Sensitivity Analysis	Reading: Albright & Winston, Chapters 13.4-13.9 Homework: Brightlink	
13.	9/25 Weds.	Optimization in Revenue Management	Homework: SkyJet	
14.	9/26 Thurs.	Applications of Optimization	Homework: School Assignment	
15.	10/1 Tues.	Data Exploration	Homework: Grupo Nogueira (<i>Team Assignment</i>) Tableau Quiz	
16.	10/2 Weds.	Data Visualization	Homework: Data Visualization Using Tableau	
	10/4 Fri.	Exam B Review Session	3:15 to 4:45 pm	
	10/5 Sat.	Exam B	9 am to noon	



FINANCIAL ACCOUNTING

Summer 2024

Contact Info

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Course Scribe: TBA

T'25 Course Reps: TBA

Section 1:Section 3:

T'25 Teaching Assistants:

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Course Objectives

The core Financial Accounting course at Tuck is managerially oriented and focuses on the most salient aspects of accounting. It is designed to help MBA students learn how to read, analyze, and interpret financial accounting data to make informed business decisions and quickly obtain a bird's eye view of business performance and financial position.

Students should not expect to become technical experts, but rather to be able to confidently converse with accountants and non-accountants in a future career in business. You will learn the concepts and principles that underlie financial statements, the structure of financial statement data, and develop intuition needed to make connections between accounting and other disciplines such as finance, strategy, marketing and economics.

The concepts and applications from this course will benefit any student interested in working in the financial services industry, corporate/strategic development of a business, as well as working in marketing, brand management or operations for a corporation and being responsible for a product or divisional budget, projections and profit/loss statement.

Course Materials

1. Calcbench

You will need to setup an account with Calcbench at https://www.calcbench.com/dartmouthLinks to an external site. We will use this financial tool to examine accounting disclosures and analyze financial data contained in 10-Ks and 10-Qs throughout the course. If you have any trouble, please email support@calcbench.com. Note that we will also access the same 10-Ks and 10-Qs by using the www.sec.govLinks to an external site. website, but Calcbench will offer some useful functionality that the SEC website does not.

2. Course Notes (and Concept Checks)

Each Class Prep document will contain a set of course notes as background reading in preparation for each class. These notes are intended to summarize the key points needed to understand that days' class material and reduce. Reading them will suffice for many of you but some of you may want to access the more detailed explanations and illustrations provided in a typical textbook (see below for a textbook option). Similarly, the concept checks in Canvas allow you to engage with a selection of key practice problems, while the eBook will have many more practice problems for those of you wanting (or needing) to spend more time.

3. Financial Accounting for MBAs (Optional eBook)

If you are new to accounting you might find the eBook useful. The eBook is Financial Accounting for MBAs, 9th Edition, by P. Easton, J. Wild, R. Halsey, and M. McAnally 2025, Cambridge Business Publishers. If you wish to access the eBook, instructions are below. There is no cost to you.

- 1. Go to your course in Canvas.
- 2. Find and launch any myBusinessCourse assignments.
- 3. If it is your first time integrating and you do not have an account with myBusinessCourse, one will automatically be created for you. If you already have an account, you will be prompted to login.
- 4. Enter the following access code in the *Enter Access Code* option: **9rFpAWnvacuKzNjS**
- 5. Select Submit

If you have any trouble, please email mbcsupport@cambridgepub.com.

Sharing the access code above with anyone other than T'25s enrolled in Sections 1 and 3 is a violation of the Tuck Academic Honor Principle.

Course Grade

Course grades in Financial Accounting are based on class participation (10%), homework assignments (30%), the midterm (30%), the financial forecast project (10%), and the final exam (20%).

Note that homework assignments should be completed and uploaded by each individual student, although collaboration with other students in Sections 1 and 3 is encouraged. The financial forecast project is a group project. Exams are strictly individual work.

Class Preparation - Classroom Rosenwald

Class preparation documents for each class session are provided on Canvas. They include a summary of key concepts covered, suggestions for background reading, class notes and required homework that will be graded. Refer to each homework assignment in Canvas for details regarding what to submit. Note that homework assignments should be completed and uploaded by each individual student, although collaboration with other students in Sectons 1 and 3 is encouraged.

You should prepare the required homework assignments **before class** (including consideration of study questions that do not need to be handed in) and be ready to participate actively in the class discussion. Homework will be graded based on perceived effort (i.e., 0 = nothing handed in; 1 = poor effort; 2 = good effort). I will drop your two lowest homework grades at the end of the course.

Assignments should be uploaded to Canvas prior to class. Please format your answers to make them easy to read. Much of our discussion in class, as well as exam questions, will build directly on the concepts covered in the assignments. As such, I encourage you to review all assignments individually and in your groups to ensure that you truly understand the key

concepts covered in each assignment.

Your grade in the course (not to mention your understanding of financial accounting) will almost certainly suffer if you do not keep up with the assignments or rely too heavily on classmates to complete assignments. Late homework will not be graded.

Support Outside of Class Hours

You will find faculty/TA support outside of the classroom in three ways. Note that TA office hours and optional review sessions will populate your Outlook calendar as part of your normal course Exchange sync. These events will appear as free time.

1. Faculty Office Hours:

I will not hold regular office hours but will do my best to make myself available upon request either one-on-one or for small groups. Please make an appointment to see me for help and do not stop by my office unannounced. I am also happy to answer concise clarification questions by email.

2. Teaching Assistant (TA) Office Hours:

Two TAs will be available to answer clarification questions about upcoming assignments, or to review solutions to past assignments on a first come first serve basis.

In-person (*Ankeny*): 7:00pm - 8:00pm: Aug. 19, 20, 21, 27, 28, Sep. 3, 4, 10, 11, 17, 18, 24, 25 Oct. 1, 2

2. Optional Review Sessions:

During these optional sessions, you will solve practice problems related to each week's material. Both the problems and solutions are posted in Canvas. You are encouraged to work on these problems regardless of whether you do so during the review session as they are a good way for you to gauge your understanding of the material.

5:00pm - 6:00pm on Aug. 22 (Barclay), 29 (Barclay), Sep. 5 (Barclay), 19 (Barclay), 26 (Rosenwald)

Midterm and Final Exam

The midterm and final exam will be administered *online* and accessed via Canvas as an Assignment. Therefore, all practice midterm and final exams are also available in Canvas as online exams.

Completion of the online practice exams is optional and will not impact your course grade, however, a side benefit to looking at them is that the more familiar you are with the 'look and

feel' of online testing the more comfortable you will be on the day of the actual midterm and final. If you actively participate in the learning process, attend all class sessions, and diligently complete all of the homework assignments, you will be prepared to tackle the content of these exams.

MIDTERM

The online midterm exam will be offered on Friday, September 13th from 9am - 12pm.

I will host an optional midterm review on Thursday, September 12th from 3:20pm - 4:50pm in Georgiopoulos. We will review key concepts covered during class sessions 1 through 9.

FINAL

The online final exam will be offered on Friday, October 4th from 9am - 12pm.

I will host an optional final review on Thursday, October 3rd from 1:30 pm - 3:00 pm in Georgiopolous. We will review key concepts covered during class sessions 10 through 14. Expect the final exam to feel cumulative in nature, as content builds throughout the course.

Attendance Policy

Class attendance is mandatory. Absences, except for emergencies, may adversely impact your final class participation grade (missing class for recruiting activities is not an excused absence). If you must miss a class, **please email cindi.mansell@tuck.dartmouth.edu** prior to class, noting the reason for your absence. Of course, you remain responsible for knowing the material and for completing assignments that are due on a day you miss. Otherwise, there is nothing to do to 'make up' a missed class.

Tuck Academic Honor Principle

The Tuck Faculty take the Tuck Academic Honor Principle seriously and view it as a critical aspect of the learning environment.

Tuck's Academic Honor Principle: "Integrity and honesty in the performance of academic activities, both in the classroom and outside, are essential to the educational experience for which the Tuck School has always stood. Each member of the Tuck community accepts the personal responsibility to uphold and defend high ethical standards in all academic endeavors, and to promote an atmosphere in which honest and imaginative academic work may flourish."

The prevalence of group work is consistent with Tuck's philosophy that much of your education will come from each other. At the same time, it is essential for you to master the material on your own and to evidence this mastery on exams taken as individuals. Thus, while group assignments should be completed in groups, putting your name on the assignment certifies that you helped in its preparation and understand essentially all of the answers provided (not just a small component assigned to you).

All exams must be completed without outside help and reflect individual work.

It is also a violation of the Academic Honor Principle to use course materials from previous years without my explicit permission.

Schedule

Financial Accounting Syllabus Summer 2024

Session	Day	Date	Торіс
1	Tues	Aug 20	Introducing financial accounting
2	Wed	Aug 21	Constructing financial statements
3	Thurs	Aug 22	Accruals and deferrals
4	Wed	Aug 28	Earnings versus cash flow
5	Thurs	Aug 29	Revenue recognition
6	Wed	Sept 4	Cash flow reporting
7	Thurs	Sept 5	Financial analysis
8	Wed	Sept 11	Building a three-statement model
9	Thurs	Sept 12	Using a three-statement model
	Fri	Sept 13	Midterm Exam
10	Wed	Sept 18	Accounts receivable & revenue
11	Thurs	Sept 19	Inventory & cost of goods sold
12	Wed	Sept 25	Long-term assets & depreciation and amortization
13	Thurs	Sept 26	Equity & share issuance and repurchase
14	Wed	Oct 2	Liabilities & interest expense
15	Thur	Oct 3	Final project presentations
	Fri	Oct 4	Final Exam



FINANCIAL ACCOUNTING

Summer Term, 2024

Professor Phillip Stocken 206 Chase Hall 603-646-2843

Course Objectives

The objectives of the Financial Accounting course are to develop your leadership capability by helping you (1) understand the concepts and *measurements* that underlie corporate financial statements, (2) develop the skills needed to *analyze* financial statements effectively, and (3) understand the choices firms make in *reporting* the results of their business activities.

The first portion of the course develops the fundamental concepts and procedures underlying corporate financial statements (including the income statement, balance sheet and statement of cash flows) that are prepared under generally accepted accounting principles. The second portion introduces tools for analyzing profitability and risk and for preparing projected financial statements. The third portion studies the impact on corporate financial statements of alternative accounting choices available under generally accepted accounting principles and explores the faithfulness with which a firm's financial reporting strategy reflects its underlying economic circumstances.

Tuck's mission is to educate wise leaders. It develops the functional skills that business leaders need to make decisions, the tools used to gather and analyze data, and the leadership ability to craft, communicate, and execute a vision for change with and through other people. The three parts of this course contribute to leadership development in the following ways:

o First, a leader recognizes that willingness to change is often essential to the health and growth of the organization. To assess the need for change, a leader should be capable of evaluating the financial health of the organization and assess its health relative to its competitors. Accordingly, the first portion of the course enables a student to understand how a generic firm's activities are reported and to assess the firm's performance and financial position.

Financial Accounting Syllabus Summer 2024

Second, to craft a compelling vision for the future, a leader must understand the firm as a whole since a general manager bears responsibility for the entire organization. A leader must also evaluate how factors external to the firm are changing and devise innovative approaches to address these changes. To effectively guide execution of the vision with and through other people, a leader aligns all aspects of the organization with this strategic vision. The second portion of the course enables a leader to evaluate a generic firm's performance and risk, assess its performance relative to its rivals, and identify ways of improving its performance. This portion of the course emphasizes how key performance indicators must align with the general manager's vision for the future and how the firm's pro forma financial statements and budgets are used to communicate this vision throughout the organization and to capital market participants, such as investors and analysts.

O Third, by carefully examining the accounting policies and procedures that are used to measure and recognize a firm's key activities, the third portion of the course enables a leader to better understand the firm's economics performance and to represent this performance more faithfully to capital market participants and people within the organization. Thus, this portion empowers a leader to better understand the need for change and communicate and guide execution of the leader's vision with and through other people.

Course Materials

All course material is provided in the Canvas portal — the learning management system that Tuck uses. An electronic copy of the *course packet*, which is in Canvas, contains course assignments, practice exams, and the class notes. These notes and relevant cases should be bought to each class session.

If you are seeking an expanded discussion of concepts over and above the course notes, chapter readings and optional problems listed later in the syllabus are provided in the course textbook, *Financial Accounting: An Introduction to Concepts, Methods, and Uses*, by Weil, Schipper and Francis (14th edition). Various electronic and hardcopy options are available at https://www.cengage.com/c/financial-accounting-an-introduction-to-concepts-methods-and-uses-14e-weil/9781111823450PF/

Class Preparation and Participation

Class preparation consists of assigned (1) readings (2) asynchronous videos, and (3) problems and cases. You should be prepared to discuss all aspects of an assignment in class.

The most important requirements for this course are thorough preparation and analysis of the class notes and related reading material before each class. In addition, in anticipation of the class session, you should carefully study the asynchronous videos provided in Canvas and analyze the assigned problems and cases, as indicated in the syllabus that follows on page 6 onwards of this syllabus. Thorough preparation before each class session will allow you to actively participate during the class sessions by both asking and responding to questions.

Optional problems are suggested in the syllabus if you find that you need either guidance before preparing the assigned problems or additional practice to reinforce the concepts covered in class. Solutions to all optional problems listed in the syllabus are available in the course folder in Canyas.

You are asked to turn in solutions to assigned problems or cases at the end of each week (thereby allowing you to sequence your workload for the week among your various courses). These problems and cases are denoted by an asterisk in the syllabus. All homework solutions will be handed in electronically in Canvas - instructions for doing so are on page 15 of this syllabus. Homework assignments are meant to be a learning tool and a way to gauge your level of understanding. While you should feel free to discuss these assignments with your learning team or seek assistance with these assignments, you are *individually* responsible for turning in each assignment.

Grading

Your course grade will be based on a mid-term examination, a final examination, submitted assignments, and class participation. The midterm will emphasize material covered in sessions 1 to 9. The final examination will emphasize material covered in sessions 10 to 15. There is a cumulative nature to the material in this course, however, so that some testing of earlier material is inevitable. The exam and related solutions from the prior two offerings of the course are in Canvas. As the exams in this course will be administered via Canvas, the exam content from the prior two years is provided in Canvas to allow you to practice taking an on-line exam.

Each exam will be closed-book and notes. Each student may bring to the exam one page (8.5×11) of memory notes that are individually prepared; both sides of the page can be used. You may use your computer or a hand-held calculator in exams for mathematical calculations only.

The following guidelines will be used to evaluate your overall course performance:

Mid-term Exam	35%
Final Exam	35
Class Participation	15
Homework	<u>15</u>
	100%

If a student's mean adjusted score for the Final Exam improves relative to the mean adjusted score for the Midterm Exam, the Midterm Exam will receive a weight of 20% and the Final Exam a weight of 50%.

Assistance with the Course

There are three sources of additional help with the course. First, I am happy to schedule office visit appointments (as social distancing regulations permit). To schedule a visit, please send me an email.

Second, I will host weekly evening office hours as listed on page 14 of this syllabus— see 'Optional Sessions for Assistance with the Course'. The purpose of these office hours is to reinforce concepts by working through additional problems; no new concepts will be introduced. The problems and solutions will be available in advance in Canvas.

Third, second-year student teaching assistants will hold office hours as listed on page 15 of this syllabus – see 'Optional Sessions for Assistance with the Course'. The purpose of these office hours is to answer specific questions on a one-on-one basis. There will not be a formal presentation.

Attendance Policy

You are expected to attend all classes in the section to which you are assigned unless an emergency prevents you from doing so. Please notify me and the class scribe in advance of any absences. Failure to attend and participate in classes will adversely affect your course grade and more than three unexcused absences will result in a failing grade.

The class participation grade is affected by general "classroom" behavior. Students will lose points in this category for: being absent without informing your professor ahead of time, not using the video functionality of zoom, arriving late to class, or leaving class early, or exhibiting behavior considered to obstructive to the learning of other students in class.

Tuck Honor Code

The Academic Honor Code is a critical aspect of the learning environment at Tuck. The prevalence of group work is consistent with Tuck's philosophy that much of your education at Tuck will come from each other, and we encourage you to discuss all assignments within your learning team before class. At the same time, it is essential for you to work through the assignment on your own to master it and to solidify your understanding. A common mistake is to overly rely on others in the learning process.

In this light, the final deliverable for all assignments should be your own *individual* work. The desirable sequence is for you to read and prepare a solution to the assignment on your own before working with your learning team. As a result of discussions within your learning team, you should then go back and revise your solution on your own. There should never be a unique solution that is essentially identical by all members of the learning team as your solution reflects your own thinking.

Discussion of assignments with *second-year* students (except course teaching assistants) before submitting for a grade is a violation of the Honor Code. Once an assignment is turned in, you may discuss it with anyone. Obtaining past course material (e.g., past cases or past exams) not included in the course packet or otherwise made available by the faculty is a violation of the Tuck Honor Code.

During the exams, you may not consult with anyone except Professor Stocken.

The use of ChatGPT and similar systems is expressly forbidden on the midterm exam and the final exam. You are welcome to use ChatGPT to aid in answering your homework assignments.

If you have any questions about how the Honor Code applies to any other aspect of this course, please ask.

Learning Objectives and Assignments

Notations defined:

- * denotes homework assignment to be handed-in to be graded.
- CP denotes cases / reading materials in the Canvas Portal.

CASE denotes cases subject to cold calls during the on-line class sessions.

I. Financial Measurement

Session 1: Tuesday, August 20

Overview of Business Activities and Principal Financial Statements

Learning Objectives

- 1. Discuss purpose of financial reporting.
- 2. Obtain an overview of the principal activities of firms and how the activities relate to the three principal financial statements.
- 3. Observe the types and limitations of financial statements.

Read: Overview course notes (Chapter 1 from textbook).

View: "Overview of Financial Accounting" in Canvas.

Have the extracts from Walmart's 2024 Annual Report (CP) on hand.

Optional Problems: 1-34, 1-35, 1-38, 1-39 from textbook.

Balance Sheet: Measuring the Financial Position

Learning Objectives

- 1. Understand that the purpose of the balance sheet is to report the results of a firm's investing and financing activities at a point in time.
- 2. Apply the accounting concepts for asset and liability recognition, valuation and disclosure under generally accepted accounting principles (GAAP).

Read: Balance Sheet course notes (Chapter 4 from textbook).

Complete: Learning assessment in Canvas.

Optional Problems: 4-22, 4-24, 4-26 from textbook.

Session 2: Wednesday, August 21

Balance Sheet (continued)

Learning Objectives

- 3. Discuss the key components of owners' equity.
- 4. Apply the double-entry recording framework to a series of transactions that results in a balance sheet.

Read: Balance Sheet course notes (Chapter 2 from textbook).

Complete: Learning assessment in Canvas.

Prepare: General Enterprises – Part A (in course notes).

Optional Problems: 2-15, 2-18 from textbook, Refresh Inc. (Part A).

I. Financial Measurement (cont.)

Session 3: Thursday, August 22

Income Statement: Measuring Operating Performance over a Period

Learning Objectives

- 1. Understand that the purpose of the income statement is to report the results of a firm's performance over a fiscal period.
- 2. Understand the difference between the cash basis and the accrual basis.
- 3. Apply the accounting concepts for revenue recognition and measurement under the accrual basis.
- 4. Apply the accounting concepts for expense recognition and measurement under the accrual basis.
- 5. Discuss the relation between the income statement and balance sheet.

Read: *Income Statement* course notes (Chapter 5 from textbook).

Complete: Learning assessment in Canvas.

Prepare: Top Line CASE (CP).

Optional Problems: 5-11, 5-13, 5-28 from textbook.

Week 1 Homework due Friday, August 23 by 11:59 pm:

Small Beginnings (CP)*

I. Financial Measurement (cont.)

Session 4: Wednesday, August 28

Income Statement (continued)

Learning Objectives

6. Apply the double-entry recording framework to a series of transactions that results in a balance sheet and an income statement.

Read: *Income Statement* course notes (Chapter 3 from textbook).

Complete: Learning assessment in Canvas.

Prepare: WorldCom CASE (CP), General Enterprises – Part B (in course notes).

Optional Problem: 3-24, 3-27, 3-31 from textbook, Mary Lou's, Refresh Inc. (Part B),

Tertia

Session 5: Thursday, August 29

Statement of Cash Flows: Measuring the Cash Flow Effects of Operating, Investing, and Financing Activities

Learning Objectives:

- 1. Discuss the information value of the statement of cash flows.
- 2. Discuss the relation between the statement of cash flow, income statement, and balance sheet.
- 3. Develop skills in transforming income statement and balance sheet data to cash flow data.

Read: Statement of Cash Flows course notes (Chapter 6 from textbook).

Complete: Learning assessment in Canvas. Prepare: Steady Company (in course notes).

Optional Problems: 6-33, 6-34, 6-36 from textbook.

Week 2 Homework due Friday, August 30 by 11:59 pm:

Up-and-Running (CP)*

Up and Running: Watch the Cash! (CP)*

I. Financial Measurement (cont.)

Session 6: Wednesday, September 4

Statement of Cash Flows (continued)

Learning Objectives

- 4. Reinforce skills in transforming income statement and balance sheet data to cash flow data.
- 5. Consider relations between net income and cash flow from operations and between cash flows from operating, investing, and financing activities for various types of businesses.

Prepare: U.S. Steel Corporation (in course notes).

Complete: Learning assessment in Canvas.

Optional Problems: 6-40, 6-41 from textbook, Psilos, Snow Hut.

II. Financial Analysis

Session 7: Thursday, September 5

Financial Statement Analysis

Learning Objectives:

- 1. Introduce tools for analyzing a firm's overall profitability (Return on Assets) and examine how profit margin and asset turnover ratios provide information about the strategy of a business.
- 2. Analyze a firm's Return on Equity and discuss the effect of financial leverage on a firm's Return on Equity.
- 3. Introduce tools for analyzing a firm's short-term liquidity risk (including its working capital management).
- 4. Introduce tools for analyzing a firm's long-term solvency risk and identifying constraints on financial leverage.

Read: Financial Statement Analysis course notes (Chapter 7, pp. 219-244, from textbook).

Complete: Learning assessment in Canvas.

Prepare: Walmart Profitability and Risk 2021 CASE (CP). Optional Problems: 7-14, 7-19, 7-21, 7-23 from textbook.

Week 3 Homework due Friday, September 6 by 11:59 pm:

Fast Sails (CP)*

Dehler - Transaction Analysis — see Canvas for the on-line assignment*

II. Financial Analysis (cont.)

Session 8: Monday, September 9

Pro Forma Financial Statements

Learning Objectives

- 1. Reinforce the relations between the three principal financial statements by preparing pro forma financial statements from a given set of assumptions.
- 2. Practice designing a financial spreadsheet.

Read: *Pro Forma Financial Statements* course notes (Chapter 7, pp. 245-254, from textbook).

Complete: Learning assessment in Canvas.

Prepare: Walmart Pro Forma 2021 CASE – Part (a) (CP)* - an Excel template with account titles and amounts is available in Canvas. The CASE contains the assumptions required to complete the template.

Workshop preparing Walmart Pro Forma 2021 CASE - Part (a) | Section 2: 1:30 – 3:00 pm and Section 4: 3:20 – 4:50 pm | **Barclay classroom** (note room change)

Session 9: Wednesday, September 11

Pro Forma Financial Statements (continued)

Learning Objectives

- 3. Discuss the preparation of pro forma financial statements.
- 4. Assess sensitivity of the financial statements to variations in pro forma assumptions.
- 5. Apply Du Pont analysis to predict and evaluate a firm's operating, investing, and financing activities.

Review: Completed Wal-Mart Pro Forma template in Canvas.

Prepare: Walmart Pro Forma 2021 CASE – Part (b) (CP)*. Part (b), which is on page 6 of the case, has two requirements to be answered before class.

Week 4 Homework due Tuesday, September 10 by 11:59 pm:

Walmart Pro Forma 2021 CASE – Part (a) and (b) (CP)*

Thursday, September 12: Optional Exam Review Session in Georgiopoulos Classroom:

1:30-3:00 pm (Sections 2&4)

Prepare: 2022 Financial Accounting Mid-Term Exam (CP).

On-line Mid-Term Exam: Friday, September 13 from 9:00-12 noon.

III. Financial Reporting

Session 10: Wednesday, September 18

Quality of Earnings and Accounting for Current Assets

Learning Objectives

- 1. Develop an understanding of the concepts of quality of earnings.
- 2. Discuss the recognition of revenue when the amount of cash to which the firm is entitled from a sale differs from the amount the firm expects to collect.
- 3. Understand the Allowance Method and Direct Write-off Method for uncollectible accounts.
- 4. Calculate inventories and cost of sales under the specific identification method and under the FIFO and LIFO cost flow assumptions.
- 5. Discuss factors causing inventories and cost of sales to differ under the FIFO and LIFO cost flow assumptions.
- 6. Discuss the valuation of inventory for declines in value below cost.

Read: Accounts Receivable course notes (Chapter 8 from textbook).

Inventory course notes (Chapter 9 from textbook).

Complete: Learning assessment in Canvas for Accounts Receivable.

Learning assessment in Canvas for Inventory.

Optional Problems:

Accounts Receivable: 8-13, 8-30, 8-32, 8-41 from textbook, Adams Golf. Inventory: 9-29, 9-43 (ignore parts c and f), 9-44, 9-46, 9-47 from textbook.

Session 11: Thursday, September 19

Accounting for Current Assets (continued)

Prepare: V.F. Corporation CASE (CP)*

Accounting for Non-Current Assets

Learning Objectives

- 1. Discuss accounting for tangible assets and intangible assets at acquisition and over their useful lives.
- 2. Discuss how to treat repairs versus improvements.
- 3. Discuss the accounting for changes in fair value and the disposal of long-lived assets.
- 4. Understand the effect of accounting choices for long-lived assets on the quality of earnings and a firm's financial position.

Read: *Long-Lived Assets* course notes (Chapter 10 from textbook).

Complete: Learning assessment in Canvas.

Optional Problems: 10-14, 10-30, 10-33 from textbook, Southwest Airlines.

Week 5 Homework due Friday, September 20 by 11:59 pm:

V.F. Corporation CASE (CP)*

III. Financial Reporting (cont.)

Session 12: Wednesday, September 25

Accounting for Non-Current Assets (Continued)

Prepare: McCormick CASE (CP)*.

Accounting for Liabilities

Learning Objectives

- 1. Understand the impact of the recognition and valuation of liabilities on assessments of profitability and risk.
- 2. Calculate the issue price and subsequent market value of bonds with various cash flow patterns using present value techniques.
- 3. Apply GAAP for long-term bonds at the date of issue, during each subsequent period prior to maturity, and at maturity.
- 4. Understand the reasons why the book value of bonds under GAAP at any date may differ from the market value of the bonds.

Read: Liabilities course notes (Chapter 11 from textbook pages 415-434).

Complete: Learning assessment in Canvas.

Optional Problems: 11-17, 11-19, 11-20, 11-21, 11-23 from textbook, Sysco, FMC.

Session 13: Thursday, September 26

Accounting for Liabilities (continued)

Prepare: Rite Aid CASE (CP)*.

Week 6 Homework due Friday, September 27 by 11:59 pm:

McCormick CASE (CP)*
Rite Aid CASE (CP)*

III. Financial Reporting (cont.)

Session 14: Monday, September 30

Accounting for Shareholders' Equity

Learning Objectives:

- 1. Understand the most common components of shareholders' equity.
- 2. Understand the economics events that alter shareholders' (or owners') equity, and how to account for them.
- 3. Understand the accounting for treasury stock.
- 4. Discuss the accounting for restricted stock granted to employees.

Read: Shareholders' Equity course notes (Chapter 15 from textbook).

Complete: Learning assessment in Canvas.

Prepare: Finding Treasure (CP).

Optional Problems: 15-14, 15-16, 15-18, 15-19, 15-25, 15-27, 15-29 from textbook, IBM,

Pfizer.

Session 15: Wednesday, October 2

Accounting for Shareholders' Equity (continued)

Prepare: Starbucks Corporation CASE (CP)*.

Synthesis of Financial Reporting

Learning Objectives:

1. Review learning objectives from Sessions 10 through 14.

Prepare: Synthesis CASE (CP)*.

Week 7 Homework due Wednesday, October 2 by 11:59 pm:

Starbucks Corporation CASE (CP)* Synthesis CASE (CP)*

<u>Thursday, October 3: Optional Exam Review Session – Georgiopoulos Classroom:</u>

1:30-3:00 pm (Section 2&4)

Prepare: 2022 Financial Accounting Final Exam (CP).

On-line Final Exam: Friday, October 4 from 9:00-12:00 noon.

Optional Scheduled Sessions for Assistance with the Course

Faculty Evening Office Hours from 5:00 to 6:00 pm – Barclay Classroom:

Week 1: Thursday, 8/22

Week 2: Thursday, 8/29

Week 3: Thursday, 9/5

Week 4: No Faculty Evening Office Hours - Midterm Exam Review

Week 5: Thursday, 9/19

Week 6: Thursday, 9/26

Week 7: No Faculty Evening Office Hours - Final Exam Review

TA Evening Office Hours from 7:00 to 8:00 pm – General Motors:

Week 1: Tuesday, 8/20 and Wednesday 8/21

Week 2: Wednesday, 8/28

Week 3: Wednesday, 9/4

Week 4: Tuesday, 9/10 and Wednesday, 9/11

Week 5: Wednesday, 9/18

Week 6: Wednesday, 9/25

Week 7: Monday, 9/30 in (Ankeny Classroom) and Wednesday, 10/2

Financial Accounting Syllabus Summer 2024

Submitting Homework Solutions to Canvas

PDF file that is to be uploaded to Canvas. Prepare to upload a single PDF file for each assignment. In the first week, you have only one assignment and therefore will upload only one PDF file. For subsequent weeks, however, you typically will have multiple assignments and therefore will upload multiple PDF files. Please name your PDF file(s) with the name of the case – i.e., Case_Name.pdf. Upon uploading the file, Canvas will automatically append your first and last name to the file name that you created so that each student's solution is uniquely identifiable.

Once in *Financial Accounting* on Canvas, to upload an assignment/file, click on 'Assignments'. Then click on the specific assignment for which you wish to upload a solution. On the top right-hand side of your screen, click on 'Start Assignment'. Click on 'Upload File' and attached the PDF file containing your solution to the assignment. If you are handing in multiple assignments, click on '+ Add Another File' and repeat until all solutions for the homework requirement are attached. Finally, click on 'Submit Assignment'

Note that, as a default option in Canvas, you will receive an email notifying you of your grade on every homework assignment. If you do not wish to receive these emails but would prefer to access and view your grades in Canvas from time to time, you can change your notification preferences in Canvas. The settings, however, will apply to all courses, not just *Financial Accounting*.



Management Communication Summer 2024

Faculty

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Academic Coordinators

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COURSE DESCRIPTION

Communication is a critical component of business leadership. Outstanding leaders command the attention of an audience through their ability to engage and influence outcomes. In Management Communication (ManComm), you'll focus on delivery of professional presentations both with and without slides. You will be asked to present individually and in teams. In addition, you'll give and receive feedback with a goal of helping each other be more aware of how an audience perceives your strengths and areas of opportunity.

Practice is the catalyst for improving communication. The course is designed so that you practice with intention, following an iterative prepare-present–reflect framework that is repeated each week. By practicing with intention, you can significantly improve your

communication in a relatively short timeframe. Prior to class, you will learn key concepts via Canvas video modules and incorporate those concepts into the presentation you prepare for class. In every class, you will present, be recorded, and receive feedback from classmates and your professor. Following class, you will complete a reflection assignment, watching your video and reviewing the feedback to assess what worked, what didn't, and what you want to prioritize for the following week.

COURSE GOALS

This course is highly interactive. Each ManComm class will have no more than 14 students. In every class, you will be expected to actively participate as a speaker and as an audience member, providing feedback to each classmate.

Frameworks and skills learned in the course will enable you to:

- 1. <u>Identify your personal delivery style and enhance your connection with your audience</u> In this course, you will "see yourself as others see you". Through video and peer feedback, you will identify your individual delivery style, including those behaviors that enhance or detract from your message. Each week, you will practice your delivery and experiment with techniques to enhance your connection with the audience.
- 2. <u>Deliver and receive constructive feedback</u>

The ability to deliver and receive feedback is a critical skill for business leaders. Throughout the course, you will deliver real-time feedback to your peers in both verbal and written format. You will also utilize the feedback you receive to set your practice intentions for future in-class presentations.

- 3. <u>Improve your communication impact through effective message structure</u>
 You will learn to utilize structure, story and sequencing to enhance your communication effectiveness. By honing these skills, you will increase the impact of your message.
- 4. <u>Use supporting visuals to enhance your delivery</u>

You will learn a technique for presenting visuals that facilitates your audiences' understanding of complex information. In addition, you will practice slide design based on the latest cognitive research on how people process and retain information.

COURSE MATERIALS

Course Materials:

Course Pack: Assignments & Templates

The course syllabus, assignment details and templates are available in Canvas.

Note: This class is about professional communication and your weekly Self-Reflection is a professional document. Self-Reflections should be typed utilizing the templates available in Canvas.

Canvas Video Modules

ManComm is a 'flipped' class with in-class time devoted to presentations and feedback. Canvas video content covers key communication concepts and core learning objectives. You'll need to watch the videos before class and then incorporate the concepts into your presentations each week.

We've focused the video content on narrow topics to make it easy to review them as needed in the future. For some videos, you will be asked to complete a quiz to test your understanding of the material. On-time review of the modules and completion of quizzes contributes to the Participation component of your course grade.

GRADING

Participation, Performance & Weekly Self-Reflection	40%
Final Presentation	30%
Final Self-Reflection	20%
PowerPoint Assignment	10%

Participation, Performance & Weekly Self-Reflection (40%)

Class time will be devoted to student presentations and feedback, **100% class attendance is required**. By implementing the prepare-present-reflect routine each week, you will accelerate your learning and performance improvement. We'll track and grade your progress through your participation, weekly performance and Self-Reflection:

Participation:

In advance of class, we'll be tracking completion of Canvas video modules and quizzes. During class, the quality of your participation will be based on the degree to which you actively engage in class, experiment to test the boundaries of your comfort zone and provide constructive and specific feedback to help your classmates improve.

Performance:

Following every class presentation, you'll receive qualitative written feedback from your professor based on the communication concepts covered in that week's Canvas video modules. In addition, you'll receive a quantitative grade during Class 2 (focused on message structure) and Class 3 (focused on delivery with visuals). Your Final Presentation in Class 4 will be graded separately.

Weekly Self-Reflection:

Following each in-class presentation, you will reflect on your performance. Self-Reflections focus on your delivery, communication structure, and presenting with slides. You'll review your own video and the feedback from your classmates and professor to help you identify opportunities to improve during the following week.

Your first three Self-Reflections will be graded based on completion: you will receive full credit by uploading your completed Self-Reflection to Canvas before the start of your next class. Note: You will not receive individual feedback on your weekly Self-Reflection. Each student is expected to check his/her/their responses against the weekly Self-Reflection grading memo and seek help from the professor, if desired.

Final Presentation (30%)

In Class 4, your Final Presentation grade will be based on:

- Audience Strategy, PowerPoint structure, story and visuals (50%)
- Delivery performance (50%)

Final Self-Reflection (20%)

At the end of the course, you will complete a Final Self-Reflection. You will be evaluated on the quality and thoughtfulness of your reflection; this grade will not be impacted by your Final Presentation grade.

PowerPoint Assignment (10%)

We will provide you with a storyboard and data as the basis for a short PowerPoint assignment. Your PowerPoint deck will be graded on the professionalism of your visuals, the overall appearance of the slides, your ability to create deliverables required by a senior manager, and the application of the principles presented in the Slide Design Basics video module. Format guidelines for charts and diagrams are provided in the storyboard.

POLICIES

Honor Code

As a reminder to all of us, here is a statement of Tuck's Academic Honor Principle:

"Integrity and honesty in the performance of academic activities, both in the classroom and outside, are essential to the educational experience for which the Tuck School has always stood. Each member of the Tuck community accepts the personal responsibility to uphold and defend high ethical standards in all academic endeavors, and to promote an atmosphere in which honest and imaginative academic work may flourish."

Attendance & Absences

The Tuck educational experience is co-created by students and instructors. Your preparation, inperson presence, and active participation are important for its success.

In ManComm, class time is devoted to student presentations and feedback. **100% class attendance is required**. Attendance will be an important part of the class participation grade. It is Tuck policy that missing a class for recruiting activities is not considered an excused absence. It is your responsibility to work with recruiters and career services to avoid these disruptions.

If you must miss a class (e.g., for illness or family emergency), please *notify your professor and Kim Poirier by email before class*. The email should include the date and reason for your upcoming absence. In accordance with the Tuck Honor Principle, you are expected to provide forthright, timely, complete, and accurate information about why you need to miss class.

Compliance with the email notification policy for absences (described above) will be considered when assessing your grade. Unexcused absences will result in zero-credit for class participation and performance that day. In addition, you will not have the input you need to complete your Self-Reflection for the following week. If your absence is approved, you are responsible for knowing the material that was covered in that class, as well as coordinating an alternate means of submitting your presentation and obtaining peer feedback to apply in your Self-Reflection.

You may only attend the ManComm section to which you are assigned. In order to ensure all students have sufficient time to present and receive feedback in class, we are unable to accommodate attendance in ManComm sections other than the one to which you are assigned.

Use of ChatGPT

ChatGPT and other generative artificial intelligence (AI) tools offer new opportunities for both students and instructors. Students may make use of technology, including generative AI, to contribute to their understanding of course materials or to help brainstorm topics and themes for in-class presentations. **Development of your presentation storyline, content and visuals must be your own.** If you consult generative AI as part of your presentation research, we ask that you list it as a source on any submitted materials in standard citation format (e.g., https://style.mla.org/citing-generative-ai/). **Students may not consult generative AI for any Self-Reflection assignments, for Canvas quizzes, or for the Audience Strategy assignment.** If

you have any questions about the use of AI applications for course work, please speak with the instructor.

COURSE ASSISTANCE

Office Hours

Office hours are available by appointment. Please email your professor to coordinate a time.

PowerPoint Assignment Help Session Video

In this video, Gloria Bui, T'22 and former ManComm Teaching Assistant, walks through the PowerPoint Assignment slide by slide. If you are relatively new to PowerPoint or have limited experience creating charts and graphs, this video will provide step-by-step guidance. Follow along with Gloria and complete your own PowerPoint Assignment at the same time.

ADDITIONAL RESOURCES

References & Resource List:

A list of optional resources on a range of communication topics, including books on presentation design and videos on storytelling, is available in Canvas.

Slide Design Resources:

There are two handouts available to help you select the appropriate chart or graph for your needs:

- Quantitative Insights Handout
- Qualitative Concepts Handout

PowerPoint Tools:

Two PowerPoint add-in tools are available for use by Tuck students. These tools are currently accessible from PowerPoint in the Tuck Virtual Lab (Windows Virtual Desktop), or you may install a copy on your own computer and activate it with a license key. More information on how to access the tools on your own desktop is available in Canvas.

Think-cell®

Think-cell® is a powerful add-in for PowerPoint that can be used for quickly creating presentation charts directly from data and is used by many leading professional services firms and corporations. This tool brings you 40+ chart types including stacked bars, Gantt charts and waterfalls, as well as dozens of data-driven visual enhancements and other unique features. More information on think-cell® is available in Canvas including at video tutorial from Felix Malzfeldt, Academic Programs Associate at think-cell®. Felix demonstrates how to create some common charts and graphs using the think-cell® tool.

Mekko Graphics

Mekko Graphics is a leading add-in tool that empowers professionals to create high impact charts. The software provides three unique chart types not found in PowerPoint or Excel—the Marimekko, Bar Mekko and Cascade (Waterfall). The Mekko Graphics tool allows users to add enhancements to charts, including growth, average, comparison or regression lines, axis breaks, data rows and CAGR columns. More information on Mekko Graphics is available in Canvas including a video tutorial from Kyle Colletti, Product Specialist at Mekko Graphics.

PowerPoint Templates:

Two (2) Tuck PowerPoint templates are available for your use. The simple design provides ample real estate for displaying information and utilizes minimal graphics to avoid competing with primary content for the audience's attention.

CLASS SCHEDULE

NOTE: ALL DUE DATES ARE LISTED IN EASTERN TIME

WEEK OF MONDAY, AUGUST 19

Class #1: Delivery Behaviors

Complete three (3) Canvas video modules:

- o Introduction to ManComm
- Delivery
- o Audience-Focused Content

Prepare: 1 ½ minute Talk (no slides)

Class #1: Delivery Behaviors

Objectives:

- Establish a baseline of your verbal & non-verbal delivery tendencies
- See yourself present as others see you through peer feedback and video
- Provide your peers with written feedback on their individual delivery strengths and areas for improvement

Complete three (3) Canvas video modules: Introduction to ManComm, Delivery, Audience-Focused Content

Prior to class, complete the Canvas Video Modules and integrate your learnings from these modules into your presentation for class.

Prepare: 1 ½ minute Talk (no slides)

The focus for this week is to establish a baseline – you will give a short business presentation to a small audience and learn how your **delivery** affected that audience. In this 1½ minute **persuasive talk**, you are **asking your audience to act**.

<u>Prompt:</u> Your "audience" for this first week is a team of **colleagues at your summer internship, including senior leaders**. You want to **convince them to do something** – buy into an idea you have, inspire them to join your cause, choose you to work with them on an assignment. Choose something you are passionate about and **motivate your audience to act**.

Your goal today, as it will be every day in class and in your professional career, is to **engage and persuade your audience**.

When you present in class:

• If you have notes for your presentation, we ask that you leave them at your seat prior to presenting.

- We will time your presentation from the moment you start speaking. Your professor will stop you at $1\frac{1}{2}$ minutes. Plan for a strong finish just ahead of the 90-second deadline.
- We'll record your presentation for your review after class.
- You'll receive written feedback from your professor and classmates.

WEEK OF MONDAY, AUGUST 26

Class #2: Structured Content

Upload: Self-Reflection #1 – upload to Canvas prior to class

Complete four (4) Canvas video modules:

Neuroscience

Message Structure

Storyline

Feedback

Read: Feedback with BRIO

Prepare: 1 ½ minute Talk (no slides)

Class #2: Structured Content

Objectives:

• Apply structure to your spoken communication

- Practice verbal and non-verbal delivery skills
- Practice delivering constructive verbal feedback

Upload: Self-Reflection #1 -- upload to Canvas prior to class

Each week during the course, you will complete a Self-Reflection after class: you will leave the course with an understanding of your strengths as a presenter and effective techniques to enhance your communication.

This backward-looking reflection of your Class 1 Talk will enable you to understand your baseline delivery and "see yourself as others see you." After watching your video and reviewing your peer and instructor feedback, utilize the ACE framework to **identify your individual delivery strengths and areas to work on**. You will also **identify your Intention** – one area where you want to see improvement in the near-term.

Before you begin your Self-Reflection:

- 1. Download the Self-Reflection #1 template from Canvas
- 2. Review video of your Talk from Class #1
- 3. Review the feedback you received in class

The Self-Reflection should be no more than two (2) typed pages. Upload a copy of your Self-Reflection #1 to Canvas prior to class.

Complete four (4) Canvas Video Modules: Neuroscience, Message Structure, Storyline and Feedback.

Integrate your learnings from these video modules into your presentation for class. This week, your audience and professor will be focusing their feedback on your use of

structure.

While we are asking you to present without slides this week, these videos address principles of communication that apply equally to presenting with and without visuals.

Read:

Feedback with BRIO

During this and future ManComm classes, you'll be giving and receiving verbal feedback. The two-page brief, Feedback with BRIO, along with the Feedback video module introduces you to the 'open sandwich' approach we will be using.

Prepare: 1 1/2 - Minute Talk (no slides)

Last week you practiced delivery behaviors and connecting with your audience. The additional focus for this week is to **bring structure to your talk**, making it easy for your audience to **follow**, **and remember**, **your key points**.

Develop a **structured 90-second talk to persuade your audience to do something. Incorporate** the learnings from **the Canvas video modules** into your presentation. Your **topic is the same** as last week; you are welcome to change what you talk about if you wish.

To prepare your **content:**

- Be clear who is your **audience** and **what are you asking them to do**?
- What is **important** to this audience that will **motivate them to act**?
- As the basis for your structure, what **two points (maximum of three)** support what you are asking them to do? (i.e., "why" should they act?)

This week, **your professor's feedback will focus on your message structure**. To **structure** your talk:

Grabber -- Begin with a Grabber to get our attention

Preview -- Initially Preview your recommendation (what you are asking them to do) and the two (max of three) main points so we are introduced to them early on **Main Points** -- Develop each of your two (max of three) Main Points in a way that appeals to your audience - remember you are working to persuade them to do something

Review -- Before your time is up, Review your two (max of three) main points again

To recap - during your 1½ minute delivery, we should **hear your main points three times**: in the **Preview**, in the **Main Body** of the talk and again in the **Review**.

Practice your presentation delivery. Remember that 90% of audience impact is not what you say, but **how you say it**. Make your goal to engage and persuade your audience.

When you present in class:

- We will time your presentation from the moment you start speaking and stop you at $1\frac{1}{2}$ minutes. Plan for a strong finish just ahead of the 90-second deadline.
- If you have notes for your presentation, we ask that you leave them at your seat prior to presenting.
- We'll record your presentation for review after class.
- You'll receive feedback from your professor and classmates on your structure.

WEEK OF MONDAY, SEPTEMBER 2

PowerPoint Assignment:

Complete one (1) Canvas video module:

Slide Design Basics

Upload: PowerPoint Assignment – upload to Canvas by 5PM one week after your Class #2 session (see Canvas for specific date)

Optional

Watch: Pre-recorded TA Help Session Video – Gloria Bui, T'22 and former ManComm Teaching Assistant, walks through the PowerPoint Assignment slide by slide.

PowerPoint Assignment

Complete one (1) Canvas video module: Slide Design Basics

The Slide Design Basics video walks through good visual 'hygiene' and then gives you lots of possibilities for improving presentations through diagrams for qualitative information and graphs for quantitative information.

Upload: PowerPoint Assignment – upload to Canvas by 5PM one week following Class #2

You will create a short PowerPoint presentation based on a storyboard. You will be graded on the overall appearance of the slides, and the application of the principles presented in the Slide Design Basics video module. Details of the PowerPoint assignment and related documents are available in Canvas.

Optional Additional Resources

<u>PowerPoint Assignment Help:</u>

TA Help Session Video

Gloria Bui, T'22 and former ManComm Teaching Assistant, walks through the PowerPoint Assignment slide by slide. If you are relatively new to PowerPoint or have limited experience creating charts and graphs, watch this video while creating your PowerPoint assignment.

PowerPoint Add-in Tools:

Two PowerPoint add-in tools are available for use by Tuck students. These tools are currently accessible from PowerPoint in the Tuck Virtual Lab (Windows Virtual Desktop), or you may install a copy on your own computer and activate it with a license key. More information on how to access the tools on your own desktop is available in Canvas.

think-cell®

Think-cell® is a powerful add-in for PowerPoint that can be used for quickly creating presentation charts directly from data and is used by many leading professional services firms and corporations. This tool brings you 40+ chart types including stacked bars, Gantt charts and waterfalls, as well as dozens of data-driven visual enhancements and other unique features. More information on think-cell® is available in Canvas including at video tutorial from Felix Malzfeldt, Academic Programs Associate at think-cell®. Felix demonstrates how to create some common charts and graphs using the think-cell® tool.

Mekko Graphics:

Mekko Graphics is a leading add-in tool that empowers professionals to create high impact charts. The software provides three unique chart types not found in PowerPoint or Excel—the Marimekko, Bar Mekko and Cascade (Waterfall). The Mekko Graphics tool allows users to add enhancements to charts, including growth, average, comparison or regression lines, axis breaks, data rows and CAGR columns. More information on Mekko Graphics is available in Canvas including a video tutorial from Kyle Colletti, Product Specialist at Mekko Graphics.

WEEK OF MONDAY, SEPTEMBER 9

Class #3: Team Presentation with Slides

Upload: Self-Reflection #2 -- upload to Canvas prior to class

Complete two (2) Canvas video modules:

- Storyline to Slides
- Delivery with Slides

Prepare: Team Presentation with Slides (assigned presentations to be provided in advance to each group) - upload your slides to Canvas at least 30 minutes prior to your class

Final Presentation preparation: Audience Strategy Assignment

Upload: Audience Strategy for your Final Presentation – (see Canvas for specific date)

Optional

Watch any of the four (4) Canvas video modules that relate to each of the four aspects of HOP-T

Class #3: Team Presentation with Slides

Objectives:

- Practice presenting slides using a consistent communication structure
- Practice the interplay of speaker and visuals, keeping the focus on you as the presenter
- Practice presenting as a team

Upload: Self-Reflection #2 -- upload to Canvas prior to class

Using the template provided, complete a Self-Reflection on your use of structure and your overall delivery based on your Prepared Talk from Class #2. This week's Self-Reflection should be no more than two typed (2) pages.

Before you begin your Self-Reflection:

- 1. Download the Self-Reflection #2 template from Canvas
- 2. Review video of your Talk from Class #2
- 3. Review the peer and instructor feedback you received in class

Upload a copy of your Self-Reflection #2 to Canvas prior to the start of class.

Complete two (2) Canvas Video Modules: Storyline to Slides and Delivery with Slides In the Storyline to Slides module, you'll learn about the importance of the Executive Summary, Horizontal, and Vertical Logic.

The Canvas video module **Delivery with Slides** explains best practices for presenting with slides and a **structure for walking the audience through your visuals (HOP-T)**. This week, your audience and professor will be focusing their feedback on your use of HOP-T.

Prepare: Team Presentation with Slides (Slides to be provided) -- upload your slides to Canvas at least 30 minutes prior to your class

In this week's class, you will present several slides from a presentation that is assigned to you and your study group. Your group's assigned presentation is available in Canvas.

<u>Prompt:</u> Your audience for this presentation is a financial buyer of publicly traded companies; he/she/they has asked you to value a publicly traded company. Your recommendation is the price at which this investor should consider an acquisition of the target company and the rationale for that value.

Own the presentation: You and your study group should present the deck as though you have done the analysis and the presentation summarizes your recommendation – there is no need to spend time changing or updating slides. Focus individually on **bringing your slides** to life using HOP-T. Focus as a team on using the transitions between speakers to reinforce the storyline as a whole.

This week, **your professor's feedback will focus on your delivery with slides**, as outlined in the Canvas video modules. Present this deck using **HOP-T**. For each slide:

- Headline (main message)
- Orient (a tour of how the slide is organized)
- Key Points (the talking points that support the main message)
- Transition (building a bridge to the next slide)

Each presentation is broken into several speaking parts: decide within your study group who will present which part (make adjustments to speaking parts as necessary, based on group size) and work together to practice your delivery, integrating how you'll present your individual part with the rest of your study group. We are looking for the team to tell a cohesive story with smooth transitions between speakers and sections.

The total time for the **group's presentation may not exceed 20 minutes**.

Upload a copy of your group's presentation to Canvas 30-minutes prior to class.

Presentation guidelines:

- Remove any extra slides and on-slide notes about speaker parts before class.
- You have license to change slide order or make edits to the slides that support your delivery, if necessary.
- If you have notes for your presentation, we ask that you leave them at your seat prior to presenting.

We ask that team members stay in their seats / return to their seats when they are not
presenting, so that the audience can focus on the presenter and the visuals.

Final Presentation preparation: Audience Strategy Assignment

Upload: Audience Strategy for your Final Presentation – (see Canvas for specific date) Review your ManComm Final Presentation assignment. Then, using the template provided, complete a one (1) page Audience Strategy for your Final Presentation. The objective of this assignment is for you to explicitly identify your audience, what you want them to do, and how you will influence them to achieve your desired outcome.

Think back to the first few weeks of class:

- Be clear who is your **audience** and **what are you asking them to do**?
- What is **important** to this audience that will **motivate them to act**?
- What **two (2) main points (max of three)** support what you are asking them to do? (i.e., "why" should they act?)

Download and complete the Audience Strategy template from Canvas

Note: your Audience Strategy will *not* be returned to you before your Final Presentation.

Optional

Watch any of the four (4) Canvas video modules that relate to each of the four aspects of HOP-T

WEEK OF MONDAY, SEPTEMBER 16

Class #4: ManComm Final Presentation – Individual Presentation with Slides

Upload: Self-Reflection #3 -- upload to Canvas prior to class

Prepare: ManComm Final Presentation – 3 ½ - 4 minutes -- upload your slides to Canvas

at least 30 minutes prior to class (in both PowerPoint and PDF)

Class #4: ManComm Final Presentation - Individual Presentation with Slides

Objectives:

 Incorporate the presentation principles you've learned and practiced throughout ManComm, including audience strategy, structure, storytelling, evidence-based visuals and delivery

Upload: Self-Reflection #3 -- upload to Canvas prior to class

Using the template provided, focus on your use of HOP-T and delivery with slides in Class #3. This week's Self-Reflection should be no more than two (2) typed pages.

Before you begin your Self-Reflection:

- 1. Download the Self-Reflection #3 template from Canvas
- 2. Review video of your presentation from class #3
- 3. Review the peer and instructor feedback you received in class

Upload a copy of your Self-Reflection #3 to Canvas prior to the start of class.

Prepare: ManComm Final Presentation: $3\frac{1}{2}$ - 4 minutes - upload your slides to Canvas at least 30 minutes prior to your class (PowerPoint and PDF)

The Final Presentation will be an individual, three-and-a-half to four-minute persuasive presentation with visuals. You will incorporate all principles presented and practiced throughout this course.

Audience & Content:

Select one of the communication situations as the starting point for your Final Presentation. Each situation builds from a case you have covered in another Tuck class. Your role, your primary audience and the key question you need to answer are detailed in the Final Presentation prompts. Within your study group, every group member should select a different prompt.

Your goal is to persuade this audience to follow your recommendations. Think about your audience needs and how you will appeal to them as part of your Audience Strategy assignment. Incorporate those insights into your visuals and delivery.

Presentation Guidelines:

The presentation should be focused on a recommendation and supported by data.

- Plan for no more than four (4) minutes with a target length of 3 ½-4 minutes
- Given the short presentation length, we suggest you limit your presentation to two (2) main points
- Keep your presentation to seven (7) slides or fewer, including the title slide
- If you have notes for your presentation, we ask that you leave them at your seat prior to presenting.

Take time to review the **Presentation Checklist**. This checklist summarizes the four major components of business presentation development: Audience Strategy, Structure & Story, Visuals and Delivery. Use the checklist to confirm that you've integrated the principles covered and practiced during ManComm into your Final Presentation. The checklist also serves as the basis of **the Final Presentation grading rubric**.

Upload a copy of your presentation (in PowerPoint and PDF) to Canvas at least 30-minutes prior to class.

Optional Additional Resource

We have recorded a video with details on the assignment and pointers to guide your preparation for the Final Presentation.

ManComm Final Presentation Guidance (video)

WEEK OF MONDAY, SEPTEMBER 23

ManComm Final Self-Reflection

Upload: Final Self-Reflection by 5PM one week after your last class -- (see Canvas for specific date)

ManComm Final Self-Reflection

Upload: Final Self-Reflection by 5PM one week after your last class -- (see Canvas for specific date)

Using the template provided, complete a Final Self-Reflection reviewing your performance in this course.

There are *three parts* to this Final Self-Reflection:

- 1) Part 1 Evaluate your *Final Presentation* performance (5 points)
- 2) Part 2 Reflect on your presentation skills as they developed *throughout the course* (10 points)
- 3) Part 3 Highlight your *personal takeaways* from the course. (5 points)

Your Final Self-Reflection should be no more than six (6) typed pages.

You will be evaluated on the **quality and thoughtfulness of your Reflection**, including the **use of specific examples** to support your conclusions. We are looking to see that you have **internalized key concepts** covered in the course, **gained insight** into your delivery strengths and areas of opportunity, and have **identified takeaways** to support your continued improvement.

Before you begin your Self-Reflection:

- 1. Download the Final Self-Reflection template from Canvas
- 2. Reference your Final Presentation Slides
- 3. Review videos for your in-class presentations
- 4. Review the feedback from your in-class presentations
- 5. Review previous Self-Reflections and the Self-Reflection grading memos available in Canvas.

Upload a copy of your Final Self-Reflection to Canvas by 5PM one week after your last class (see Canvas for specific date).

Managerial Economics

The Tuck School of Business at Dartmouth Summer Term – 2024

Professors Teresa Fort and Anaïs Galdin

	Professor	Office	Academic Coordinator
Sections 1 & 3:	Prof. Teresa Fort	Buchanan 106	Carol Millay, Chase 208
Sections 2 & 4:	Prof. Anaïs Galdin	Buchanan 113	Fred Lee

Objectives

This course covers some of the most important concepts from microeconomics and illustrates how they apply to business analysis and managerial decision-making.

After an introductory, integrative case that illustrates much of what we will be covering – a nice warm-up! – the first section of the course covers principles of economics that help us to understand economic forces at work in markets. We begin with the fundamental forces of demand and supply, but progress quickly to understanding how economic forces play out in more complex market settings, including ones where market competition might lead to inefficient results. We'll be dealing with a variety of real-world industries to illustrate key concepts. You should get a good understanding of essential concepts such as the various measures of economic cost; supply and demand; entry and exit; demand elasticity; externality; and economic efficiency.

We then move from a view of how prices are determined in competitive markets to the pricing decision within a single firm. Topics include basic (monopoly) pricing; price discrimination (segmenting); and the use of advanced pricing strategies such as bundling and versioning to capture value. We will also discuss how these issues intersect with public policy in the form of regulation of monopoly, marketing and pricing tactics.

In our final session we will cover two topics that critically affect many markets – adverse selection and moral hazard. This is a nice follow-on to our work on pricing, in that sophisticated pricing strategies must take into account the nuances of consumer self-selection.

Throughout, the focus of the course will be on understanding the theory and principles sufficiently to apply them to understand real world issues and to make real world decisions. You should expect to leave the course with a firm grip on how economists think about business problems, and the ability to apply tools from the course to a variety of business situations.

Economics is at the core of almost everything in business; you will accordingly see much of what we cover here in other courses and throughout your career. Don't hesitate to come back to us with questions or to tell us about neat applications you have come across – we love to discuss economics in the real world, and your story will likely enrich some future Tuck students.

Class Preparation and Attendance

You are expected to attend class and be prepared each day. Failure to attend class will impact your grade, as will arriving late, departing early, and coming and going during class.

During the course, problems, cases, and other material will be distributed and used as a basis for class discussions. You should review and work through these materials before class. Group discussion is encouraged before and after class. Be advised that material *within each case or problem* should form the basis for any answers to case questions, whether written or oral (i.e., you cannot appeal to what you found on Google as a justification for your case analysis).

Our aim is for you to master the economic concepts we teach in class. Note that material from previous offerings of ManEc should not be used or referenced, except as distributed by the faculty. Using such material, including by feeding it into AI platforms, is a violation of the Honor Code.

To provide a first-class learning environment, and out of respect for fellow students and visitors, students *shall not use laptop computers or any other electronic communication device* (e.g., phones, tablets, etc.) in any class session unless explicit permission to do so is granted by the faculty. The only exception to this rule is a tablet or similar device that must be used flat on the table with a pencil or other non-typing mechanism. We will distribute physical handouts prior to each class, and post PDF versions to facilitate note taking. The filled-in slides are also posted after class. During class you should never - under any circumstances - use your tablet or any other device to check email, send or receive messages, or surf the net. Such behavior detracts from the classroom experience for all students, particularly those seated nearby.

We will record class sessions for those students who cannot attend in-person (e.g., because of illness) and for those who find it conducive to their learning to rewatch the session after class. This is not a substitute for class attendance. Please email our respective administrative assistants for personal access to a recording. Please do not share this access with others.

Assignments and Honor Code

We will have midterm and final exams. Both are purely individual efforts. Any collaboration on these exams constitutes a clear violation of the honor code and will result in severe disciplinary action. The use of ChatGPT and similar AI systems is expressly forbidden on the midterm exam and the final exam. Exams will be open book, open note, and calculators are allowed.

The two case presentations are to be prepared with your study group. If your name appears on the final group product, you must have put significant effort into the process that produced the final product, an effort that is not significantly different from other members of the group.

We take the honor code very seriously and will be guided by the policies set forth in the MBA Student Handbook. If there are any questions about what is expected, please raise them. If you encounter a question when we are not available, note your concern in writing and tell us how you proceeded.

Course Text

We do not have a required text for this course. However, we *recommend* Pindyck and Rubinfeld, *Microeconomics*, 9th Edition. Suggested sections from this book are listed with most of our sessions. This text is widely available in both new and used form and can also be rented from various online providers. We have examined previous editions of this text back to the 4th and we believe the differences to be minor, so an earlier edition will work well (and will be much cheaper!) but it is up to you to verify that the chapters correspond.

Note that we do not teach out of this or any other textbook, rather we view the recommended text as a good reference and an additional source for information beyond the lectures and online material discussed below. Students with minimal economics background are strongly encouraged to purchase or rent this text, while students with a stronger background can decide for themselves whether they need a text.

Another book that we offer up as an optional (and fun) read that covers much of our course content from a qualitative perspective is *The Undercover Economist* by Tim Harford.

Podcasts on current topics through the lens of economics, such as *The Indicator from Planet Money*, can be a great way to help relate the economic concepts we learn in class to current events.

Asynchronous Content

We use online asynchronous video content and practice problems to enhance classroom learning. The objective of this online material is for students to (i) learn/relearn and apply fundamental concepts, (ii) review class material, and (iii) attempt practice problems. The material has two components: (1) a set of videos that cover basic concepts, tutorials, and class material; and (2) a set of practice problems that apply the underlying concepts and where students receive instant feedback.

The idea behind this content is that the classroom discussion can focus on higher value activities, e.g., more discussion and managerial applications. Further, it ensures that all students are familiar with the basic concepts at the beginning of class and allows for the review of the material after class as well.

This material is designed to be self-paced. You should view the time you invest in working with this content as part of your normal before-class preparation. Note that your performance on the online practice problems will not be a component in your final course grade.

Exam/Case Presentation Schedule and Grading Breakdown

	<u>Type</u>	<u>Due</u>	<u>Weight</u>
Case Presentation I	Due in Class, Group	<u>Before class</u> on Tuesday, 9/3	15%
Midterm Exam	Individual, Timed	Friday, 9/6, 11:00 AM	10%
Case Presentation II	Due in Class, Group	<u>Before class</u> on Monday, 9/23	15%
Final Exam	Individual, Timed	Friday, 9/27, noon In Person	50%
Class Contribution	Individual	n/a	10%

Exam Reviews and TA Reviews

Exam review sessions will be run by the faculty. They will be held Wednesday, 9/4, 5:10 to 6:40 pm and Wednesday, 9/25, 3:20 to 5:20 pm.

There will be four problem solving sessions run by teaching assistants. They will be held Friday, 8/23, 10-11am; Thursday, 8/29, 6:30-8:00pm; Wednesday, 9/11, 6:30-8:00pm; and Wednesday, 9/18, 6:30-8:00pm.

Review Problems

Students often want to see problems similar to what will be on the midterm and final exams. We will put some old exams in Canvas, along with solutions.

SUMMARY SCHEDULE

Session	Date	Topics	Assignments
1	Mon, 8/19	Costs, Opportunity Costs, Fixed Costs, Marginal Costs, Pricing, Bidding	PR¹: Ch1 (skim); 7.1 Prepare Littleton Bottleworks Case
2	Tue, 8/20	Theory of Competitive Markets, Supply and Demand, Equilibrium and Efficiency	PR: 2.1-2.4; 7.1-7.2; 8.1-8.7; 9.1-9.2, also prepare on-line material
3	Tue, 8/27	Competitive Industry Equilibrium, in the Immediate-, Short- and Long-Run	Same reading as for session 2 Prepare: Competitive Industry Equilibrium
4	Thu, 8/29	Applying the competitive industry model: the oil tanker industry	Prepare: General Maritime Case
5	Fri, 8/30	Externalities, Pollution Taxes, Cap and Trade Systems	PR: 9.1-9.2; 18.1-18.4
6	Tue, 9/3	Applying the competitive industry model: The aluminum industry	Prepare: Alusaf Case Case Write-up #1 Due
7	Mon, 9/9	Marginal Revenue, Marginal Cost, Monopoly Pricing	PR: 4.3-4.4; 10.1-10.4 Prepare: Note on Marginal Revenue and on-line material
8	Tue, 9/10	Price Discrimination	PR: 11.1-11.3 Prepare: Segmenting the Market
9	Mon, 9/16	Two-Part Pricing, Menu Pricing, Self-Selection	PR: 11.4 Prepare: Fun Fair
10	Tue, 9/17	Bundling, Tying, Pricing, Antitrust	PR: 11.5 Prepare: Profits from Scholarship Case
11	Mon, 9/23	Versioning	Prepare: Cambridge Software Case Case Write-up #2 Due
12	Tue, 9/24	Adverse Selection and Moral Hazard	PR: 17.1-17.3 Prepare: Healthcare and Zillow articles

¹ PR = Indicates recommended sections from the 9th edition of the Pindyck and Rubinfeld textbook. Additional detail on the content of these sections is provided in the detailed session plans that follow.

DETAILED SESSION PLANS AND PREPARATION GUIDELINES

Module I. Competitive Markets

Session 1 – Monday, 8/19

Topics: Costs, Opportunity Costs, Fixed Costs, Marginal Costs, Pricing, Bidding

Read before class: Pindyck and Rubinfeld: skim Chapter 1 (Preliminaries), Section 7.1

(Measuring Cost: Which Costs Matter?)

Prepare: Littleton Bottleworks, Tuck Case

In this session we will briefly introduce the course and then move on to our first case discussion. Be prepared to answer the following questions for class discussion (nothing is to be handed-in):

- 1. How would you characterize the structure of this industry? Is it competitive? How do the forces of supply and demand impact pricing in this industry?
- 2. Build a cost model that portrays the current situation and helps you analyze the impact of different bids for the new business. A template is available in Canvas to assist in your analyses. Use this model to answer: a) what are LBC's variable production costs? b) what are its fixed costs? c) what is its variable margin (i.e., contribution)? d) How does LBC allocate its fixed costs?
- 3. What do you calculate as the cost of producing the bottles for the new opportunity? In doing this, you can assume that the UBR line will not be shut down for the next two years even if this opportunity is lost. If Littleton won the business at a price equal to your estimated cost, what would Littleton's overall financial situation look like? Should that be acceptable?
- 4. What price is necessary to achieve the 25% EBITDA target on the new product?
- 5. What do you think Littleton should bid for the two-year contract of 45 million bottles annually? What will Littleton's financial situation be if your bid is accepted?
- 6. The corporate finance manager has recommended that the UBR line be shut down if no new business can be secured in the near future. How would you respond to this proposal?

Session 2 – Tuesday, 8/20

Topics: Theory of Competitive Markets, Supply and Demand, and Equilibrium

Read before class: Pindyck and Rubinfeld: Sections 2.1-2.4 (The Basics of Supply and Demand), Sections 7.1-7.2 (Costs in the Short Run); Sections 8.1-8.7 (Profit Maximization and Competitive Supply), and Sections 9.1-9.2 (Surplus and Efficiency). **NOTE:** These chapters are core readings for the next several sessions.

Before class preparation for this session also includes the on-line material titled "Competitive Markets Pre-Class". All students should review this content before class. Additional on-line content will be posted after class.

In this session we begin our analysis of how markets allocate resources and the economic forces at work in markets. We will work to develop the fundamental economic understanding of how a competitive industry works. This day will be as close to "lecture" as we will get. There are many chapters from the recommended text listed for reading, but they are background reading for the entire first module of the course and indeed the entire course. You should try to do as much of it as possible before this session, so you're somewhat familiar with the general ideas.

Read/investigate after class:

- 1. "Buttonwood: Trench Fever," The Economist, May 4, 2019;
- 2. Stephanie Yang, "Chip Shortage Brings Frustration but More Business to Industry's Middlemen," *The Wall Street Journal*, June 13, 2021.

Optional:

For an example of a barrier to entry, after class listen to: "What's the cure for America's doctor shortage?" *The Indicator from Planet Money*, March 30, 2023.

Session 3 – Tuesday, 8/27

Topics: Competitive Industry Equilibrium

Read before class: Same as for Session 2.

Prepare: Competitive Industry Equilibrium, Tuck Note

In this session, we will finish our discussion of modeling a competitive industry and apply it to a case on Salmon fishing in Alaska. Please be prepared to explain your approach and solution to each of the case questions.

Read/investigate after class:

1. "Lumber Prices Are Soaring. Why Are Tree Growers Miserable?" *The Wall Street Journal*, February 24, 2021

Session 4 – Thursday, 8/29

Topics: Applying the competitive industry model: the oil tanker industry

Prepare: General Maritime Corporation, Tuck Case

The purpose of this case is to apply the principles of competitive markets theory to a real industry. We will see how fundamental economic forces determine not only the performance of the industry overall, but also the performance and valuation of an individual firm. Consider the following questions for class discussion (nothing is to be handed-in):

- 1. What decisions does the management team of General Maritime face in 2010? How, broadly, should they make these decisions? What information/data do they need?
- 2. On the continuum from "perfectly competitive" to "monopoly" where does the oil tanker industry lie? Why?
- 3. What determines oil tanker rates? Be prepared to discuss a framework for thinking of how rates are determined. How does your framework explain the volatility of tanker rates?
- 4. Why were tanker rates so low in 2009? Were those "equilibrium" prices? What determines how low rates can fall?
- 5. Are tanker rates in April of 2010 equilibrium prices?
- 6. Based on case data, can you provide an estimate for the long-run equilibrium daily tanker rate for the AfraMax sector of the industry?
- 7. What would you recommend GenMar do in April of 2010?

Before class preparation also includes the on-line material titled "Elasticity." All students should review this content before class.

Read/investigate after class:

- 1. "New Freighters Could Ease Red Sea Cargo Disruptions," *The New York Times*, February 2024
- 2. "From Shortage to Glut: Scotts Miracle-Gro is Buried in Fertilizer," *The Wall Street Journal*, September 2022.

Optional: Listen to/investigate a discussion about opportunity costs: "The Fed's radical new bank band-aid," *The Indicator from Planet Money*, April 10, 2023.

Session 5 – Friday, 8/30

Topics: Externalities, Pollution Taxes, Cap and Trade Systems

Read before class: Pindyck and Rubinfeld: Sections 9.1-9.2 (Surplus and Efficiency); Sections 18.1-18.4 (Externalities)

Before class preparation for this session also includes the on-line material titled "Efficiency" and "Externalities." All students should review this content before class.

In this session we will return to our model of a competitive industry and supplement it with a pollution externality. We will use carbon emissions as the case in point. A key question we will consider in class: how do carbon taxes differ from a "cap and trade" system?

Read/investigate after class:

1. "The EU's plan to sell extra carbon permits is bad for the planet," *The Economist*, May 26, 2022.

Session 6 – Tuesday, 9/3

Topics: Applying the competitive industry model: The aluminum industry

Read before class: *The Aluminum Industry in 1994* (HBS 9-799-129)

Prepare: *Alusaf Hillside Project* (HBS 9-704-458)

The purpose of this case analysis is to get you to apply some economic principles and general analytical thinking to a real-world industry and to an investment decision. The challenge is to apply the principles and problem-solving tools we've covered in class to a messy, real-world decision.

This is a group assignment. Each group should come to class with approximately 10 slides, prepared to present for 10 minutes or so, detailing and supporting your analysis and decision. Here are the key issues we expect to see in your presentations:

- 1. Overview of situation
 - a. What is the nature of competition in the industry?
 - b. What are key factors likely to affect demand and supply?
- 2. Short-run analysis
 - a. Use the data provided to construct an industry supply curve
 - b. Provide a general sense of demand
 - c. Are we in a short-run equilibrium?
- 3. Long-run analysis
 - a. How will the industry behave in the long-run?
 - b. What long-run industry equilibrium price do you predict?
 - c. How will the industry transition to the long-run? How long will this take?
- 4. Investment recommendation
 - a. Should Alusaf make the investment?
 - b. Clarify your key assumptions and any sensitivity analysis

<u>Guidance</u>: In Canvas is a large spreadsheet giving cost information for all the world's primary aluminum smelters (output is given in thousands of tons per year). Note that there is not enough data available to characterize the shape of a demand curve with confidence, however, a qualitative analysis of its general shape and position may be useful. Assume that aluminum smelters have a 25 year lifetime.

Submit on-line in Canvas a copy of your PowerPoint presentation (with any supporting notes or analysis) submit (one per group). We will likely rely on a combination of volunteers and "involunteers" to present their analysis in class.

Read/investigate after class:

1. Bob Tita, "U.S. Aluminum Producers Support Biden Tariffs on Russian Imports," *The Wall Street Journal*, February 25, 2023.

Midterm Exam

Available Online in Canvas: 9:00 AM, Friday, 9/6 Due: 11:00 AM, Friday, 9/6

Module II. Pricing

Session 7 – Monday, 9/9

Topics: Marginal Revenue, Marginal Cost, Monopoly Pricing

Read before class: Pindyck and Rubinfeld: Sections 4.3-4.4 (Market Demand and Consumer Surplus), Sections 10.1-10.4 (Monopoly).

Before class preparation for this session also includes the on-line material titled "Pricing Pre-Class". All students should review this content before class. Additional on-line content will be posted after class.

Prepare: *Note on Marginal Revenue*, Tuck Note; Read Anne Steele, "Concert Ticket Prices Soar on Consumer Demand, Not Just Inflation", *The Wall Street Journal*, April 23, 2022.

This session begins the second module of the course: pricing by firms with market power. Read over the textbook chapters and then prepare the *Note on Marginal Revenue*. Note that nothing is to be handed in.

Read/investigate after class:

- 1. Peter Thiel, "Competition Is for Losers," *The Wall Street Journal*, Sept. 12, 2014.
- 2. De Loecker, Jan and Jan Eeckhout, "Global Market Power," May 2020, NBER WP 24768.

Session 8 – Tuesday, 9/10

Topic: Price Discrimination

Read before class: Pindyck and Rubinfeld: Sections 11.1-11.3 (Pricing with Market Power).

Before class preparation for this session also includes the on-line material titled "Price Discrimination Pre-Class". All students should review this content before class.

Prepare: Segmenting the Market, Tuck Note

We will continue our initial discussion of pricing by examining a numerical problem, described in the note *Segmenting the Market*. We will go over the problem in class. Please prepare questions (1)-(4) for in-class discussion. Please also be prepared to discuss approaches for answering parts (5) and (6), which are rather challenging. Nothing is to be handed-in.

Read/investigate after class:

- 1. Elizabeth Paton, "Luxury's Gray Market is Emerging From the Shadows," *The New York Times*, Aug 24, 2021;
- 2. Josh Sisco, "Pepsi, Coke soda pricing targeted in new federal probe," *Politico*, Jan 9, 2023.

Session 9 – Monday, 9/16

Topics: Two-Part Pricing, Menu Pricing, Self-Selection

Read before class: Pindyck and Rubinfeld: Section 11.4 (Two-Part Pricing).

Before class preparation for this session also includes the on-line material titled "Two-Part Pricing Pre-Class". All students should review this content before class. Additional on-line content will be posted after class.

Prepare: Fun Fair, Tuck Note

We will move on to additional pricing techniques with the *Fun Fair* case. Please prepare questions (1)-(6) for in-class discussion. Please also be prepared to discuss an approach for answering parts (7) and (8), which are rather challenging. Nothing is to be handed-in.

Read/investigate after class:

1. Baqaee and Farhi, "Aggregate productivity and the rise of mark-ups," *Vox-EU*, December 2017.

Session 10 – Tuesday, 9/17

Topics: Bundling, Tying, Pricing, Antitrust

Read before class: Pindyck and Rubinfeld: Section 11.5 (Bundling).

Prepare: *Profits from Scholarship: The Case of Academic Journal Pricing*, Tuck Case (Be sure to read the transcription of the speech by the CEO of Elsevier starting on p. 6.) Also review the blog entry about the founding of AirBnB at https://getpaidforyourpad.com/blog/the-airbnb-founder-story/

Questions for class discussion:

- 1. Where do you put the academic journals market on the "competitive/monopolistic" spectrum? Why?
- 2. What is the ideal pricing structure for journals? From the perspective of Haank? From the perspective of the librarians? From an overall societal perspective?
- 3. What do you think about bundling? Is it profitable for the publishers? Why or why not? Why don't the libraries like it?
- 4. What do you think about price discrimination in this setting charging different libraries different prices?
- 5. What are the similarities between the cost structure of a journal publisher and AirBnB?
- 6. What do you think a key challenge would be in starting a company like AirBnB?

Read/investigate after class:

- 1. C. Farronato, A. Fradken, A. Hagiu, and D. Lomax, "Understanding the Tradeoffs of the Amazon Antitrust Case," *Harvard Business Review*, January 2024.
- 2. Tripp Mickle, "Google Earnings Smash Sales Records as Digital Ad Market Booms," *The Wall Street Journal*, April 27, 2021.
- 3. "Tech's New Stars Have It All-Except a Path to High Profits," *The Economist*, Apr. 17, 2019.

Session 11 – Monday, 9/23

Topics: Versioning

Prepare: Cambridge Software Corporation (HBS 9-191-072)

Prepare the *Cambridge Software Corporation* case as a group presentation. You will submit on-line in Canvas a copy of your PowerPoint slides and we will be asking some teams to present, just as with the Alusaf case.

Your task is to recommend which versions of Modeler Cambridge Software should produce and at what prices they should be sold. The focus of your presentation should be both *what* you think they should do and *why*. In particular, please address:

- 1. What profit could you achieve if you only sell one version at one price? How does this profitability compare across the three versions? (Note: the segment development cost applies for any segments to which you sell.)
- 2. How would you maximize profits with multiple versions if you could not practice any price discrimination? What would profits be under this scheme?
- 3. How well could you do if you could practice some price discrimination among the segments? How would you actually practice price discrimination in this setting?

Here are a few tips to guide you:

- 1. Cambridge uses a sales model in which there is a published feature and price list for all the versions they opt to make available. While price discrimination may be an interesting issue to explore here (see point (3) above) it should not form the core of your analysis.
- 2. Do not miss the 40% commission for sales of units through the bookstore channel.
- 3. Take the size of the market segment to be how many units would be sold in that segment, if you priced properly.
- 4. Any assumptions you make should be noted and justified.
- 5. There is room here to get creative but be sure you complete the basic analysis outlined above before you start thinking "outside the box."

Read/investigate after class:

- 1. Shapiro and Varian, "Versioning: The Smart Way to Sell Information," *Harvard Business Review*, Vol. 76(6), 1998. (HBR 4789).
- 2. Richard Daviess, "Why Companies Make their Products Worse", *The Economist*, Sept 15, 2016

There has been much written recently about consumer choice and limitations of rationality. An interesting summary of this work is provided by Richard Thaler and Cass Sunstein in their book *Nudge* (Penguin Books, 2008); or Thaler's more recent book, *Misbehaving*.

Module III. Information Economics

Session 12 – Tuesday, 9/24

Topics: Adverse Selection and Moral Hazard

Read before class: Pindyck and Rubinfeld: Sections 17.1-17.3 (Markets with Asymmetric

Information).

Come to class prepared to engage in an interactive discussion around the issues of adverse selection and moral hazard. Read before class:

Jonathan Gruber, "Health Care Reform is a "Three-Legged Stool," Center for American Progress, August 2010.

Anna Bahney, "Zillow to exit its home buying business, cut 25% of staff", CNN Business, November 2, 2021.

"When Employees Leave a Company, Others Often Follow," *The Wallstreet Journal*, June 10 2023.

Jason Dowlatabadi, Meng Liu, Eirk Brynjolfsson, "How Digital Platforms Reduce Moral Hazard: Uber versus Taxis", *Vox-EU and CEPR*, October 2018.

Friday, 9/27

FINAL EXAM 9:00 AM to 12 PM IN PERSON

** THE FINAL EXAM IS CUMULATIVE **

Course Materials Inventory

- 1. Littleton Bottleworks, Tuck Case 1-0126R
- 2. "Buttonwood: Trench Fever," The Economist, May 4, 2019
- 3. Stephanie Yang, "Chip Shortage Brings Frustration but More Business to Industry's Middlemen," *The Wall Street Journal*, June 13, 2021
- 4. Competitive Industry Equilibrium, Tuck Note 1-0130
- 5. "What's the cure for America's doctor shortage?," *The Indicator from Planet Money*, March 30, 2023.
- 6. "Lumber Prices Are Soaring. Why Are Tree Growers Miserable?," *The Wall Street Journal*, February 24, 2021
- 7. General Maritime Corporation, Tuck Case 1-0317R
- 8. "New Freighters Could Ease Red Sea Cargo Disruptions," The New York Times, February 2024
- 9. "From Shortage to Glut: Scotts Miracle-Gro is Buried in Fertilizer," *The Wall Street Journal*, September 2022.
- 10. Listen to/investigate after class: "The Fed's radical new bank band-aid," *The Indicator from Planet Money*, April 10, 2023.
- 11. "The EU's plan to sell extra carbon permits is bad for the planet," *The Economist*, May 26, 2022
- 12. *The Aluminum Industry in 1994* (HBS 9-799-129)
- 13. *Alusaf Hillside Project* (HBS 9-704-458)
- 14. "U.S. Aluminum Producers Support Biden Tariffs on Russian Imports," *The Wall Street Journal*, February 25, 2023.
- 15. Note on Marginal Revenue, Tuck Note 1-0129
- 16. Anne Steele, "Concert Ticket Prices Soar on Consumer Demand, Not Just Inflation", *The Wall Street Journal*, April 23, 2022
- 17. Segmenting the Market, Tuck Note 1-0131
- 18. Peter Thiel, "Competition Is for Losers," *The Wall Street Journal*, Sept. 12, 2014.
- 19. "Tech's New Stars Have It All-Except a Path to High Profits," *The Economist*, Apr. 17, 2019
- 20. De Loecker, Jan and Jan Eeckhout, "Global Market Power," May 2020, NBER WP 24768
- 21. Elizabeth Paton, "Luxury's Gray Market is Emerging From the Shadows," The New York Times, Aug 24, 2021
- 22. Josh Sisco, "Pepsi, Coke soda pricing targeted in new federal probe," *Politico*, Jan 9, 2023
- 23. Fun Fair, Tuck Note 1-0128
- 24. Baqaee and Farhi, "Aggregate productivity and the rise of mark-ups," *Vox-EU*, December 2017
- 25. Profits from Scholarship: The Case of Academic Journal Pricing, Tuck Case 1-0127
- 26. Tripp Mickle, "Google Earnings Smash Sales Records as Digital Ad Market Booms," *The Wall Street Journal*, April 27, 2021
- 27. C. Farronato, A. Fradken, A. Hagiu, and D. Lomax, "Understanding the Tradeoffs of the Amazon Antitrust Case," *Harvard Business Review*, January 2024.
- 28. "Tech's New Stars Have It All-Except a Path to High Profits," *The Economist*, Apr. 17, 2019
- 29. Cambridge Software Corporation (HBS 9-191-072)

- 30. Shapiro and Varian, "Versioning: The Smart Way to Sell Information," *Harvard Business Review*, Vol. 76(6), 1998. (HBR 4789)
- 31. Richard Daviess, "Why Companies Make their Products Worse", The Economist, Sept 15 2016
- 32. Jonathan Gruber, "Health Care Reform is a 'Three-Legged Stool'," *Center for American Progress*, August 2010
- 33. Anna Bahney, "Zillow to exit its home buying business, cut 25% of staff", *CNN Business*, November 2, 2021
- 34. "When Employees Leave a Company, Others Often Follow," *The Wallstreet Journal*, June 10 2023.
- 35. Jason Dowlatabadi, Meng Liu, Eirk Brynjolfsson, "How Digital Platforms Reduce Moral Hazard: Uber versus Taxis", *Vox-EU and CEPR*, October 2018.



MANAGING PEOPLE Summer 2024

Professor Daniel C. Feiler

df@dartmouth.edu
(He/Him, Pronounced like Filer)

Office and Office Hours

Buchanan 112, 603.646.0567 Tuesdays Noon-2pm

Classrooms and Sections

Rosenwald, Sections 1 & 3

Academic Coordinator

Laura Cota laura.l.cota@tuck.dartmouth.edu

Professor Tianna S. Barnes

tianna.s.barnes@tuck.dartmouth.edu (She/Her)

Office and Office Hours

Woodbury 301, 603.646.8825 Tuesdays Noon-2pm

Classrooms and Sections

General Motors (GM), Sections 2 & 4

Academic Coordinator

Cindi Mansell cindi.mansell@tuck.dartmouth.edu

Course Scribes

David Corriveau (Prof. Feiler) Kim Werner (Prof. Barnes)

Overview

This course is about managing people in order to achieve common goals and making intelligent managerial decisions in the face of complexity, risk, and social ambiguity. It will provide you with conceptual frameworks for increasing individual and team performance in service of organizational goals. More specific learning goals include a) increase your knowledge about individual, interpersonal and small group behavior in organizations; b) increase your awareness of your own and others' assumptions, motivations, and behavior in human interaction; and c) increase your skill in diagnosing the structural and behavioral antecedents of behavior in organizations and prescribing effective action to remedy problems.

We will address these goals by learning about the underlying psychological foundations of human behavior and will engage in case study discussions and interactive exercises to help you build effective individual and managerial skills.

Course Objectives

- Apply theories about managing people to achieve productive and satisfied organizational members and improved organizational performance.
- Develop knowledge and skills to manage your career more effectively.

Course Schedule and Format

This course will be broken into two parts: Tuck Launch and Summer Term

Tuck Launch will consist of 3-hour class sessions beginning August 6 and concluding August 14. Launch will include the first 4 course sessions. The Summer Term course will consist of 1.5-hour class sessions beginning August 27 and will repeat each Tuesday until October 1. The term will include the last 6 course sessions.

The course schedule includes the following:

Tuck Launch

1.	Leveraging Diversity	August 6
2.	Using Influence & Expertise	August 7
3.	Team Design & Coordination	August 8
4.	Putting Together the Big Picture	August 14

Summer Term

5.	Motivation	August 27
6.	Giving Feedback	September 3
7.	Negotiations	September 10
	Assignment #1 Due (start of class 8)	
8.	Navigating Difficult Conversations	September 17
9.	Decision Making	September 24
10	. Ethics and Fairness	October 1
	Assignment #2 Due (by 11:59pm)	October 3

Attendance

The Tuck educational experience is co-produced by students and professors. Your preparation, presence, and active participation are important for its success. The expectation is that you attend all scheduled class sessions. If you know you will be absent from class for any reason, please email Laura Cota (Prof. Feiler's AC) or Cindi Mansell (Prof. Barnes' AC) and your class scribe, as soon as possible (and ideally at least 7 days in advance), stating the date you will be absent. You may also report your absences through the "Planned Absence" entry in the Tuck Connect Academic menu. There, you can also report the date of absence, select the course session(s) you will be absent from, and provide your reasoning.

Because several of our sessions rely on experiential group exercises, a surprise absence could negatively affect not just your experience but also that of your classmates. Thus, it is vital that we are made aware as early as possible to make the necessary adjustments to groups. If you miss a class, you are responsible for knowing the material that was covered in that class – reach out to classmates about what you've missed, and review posted class slides. Per Tuck policy, class sessions will be recorded but not live streamed on Zoom.

It is Tuck policy that missing a class for recruiting or placement activities is not considered an excused absence. It is your responsibility to work with recruiters and career services to avoid these disruptions. Absences may be excused for personal illness, family emergencies, or religious observance.

Materials

Course materials are divided into three categories.

- 1. Required Preparation Materials: Cases and exercise materials must be read before class unless otherwise stated. They will be accessible on Canvas before class.
- **2. Required After Class Reflection Readings:** Reflection readings are required reading after the class session is complete. They will be accessible on Canvas in assignment section for the *next* class session.
- **3.** Additional Resources: Optional reading will be provided for those interested in a particular topic area in order to learn more. These are extra resources.

Grading

20% - Class Engagement

You will be expected to contribute to our class discussions in multiple ways: impromptu contributions and questions via hand-raising and thoughtful responses when cold-called. Your contributions should be clear, concise, and offer ideas that will advance our conversations. However, it is important to know that the assessment of these contributions is not "just counting." You will be assessed on the quality of your contributions, not their quantity.

40% - Assignment 1 - Completed Individually - Due September 17 at the start of class 40% - Assignment 2 - Completed Individually - Due October 3 by 11:59pm

These assignments all involve written case analysis. They focus on topics from class sessions indicated in the respective assignment. Your student ID should be at the top of the page, but no name (to facilitate blind-grading/fairness). These assignments will be completed individually and are to be uploaded to Canvas, one per person. You may consult a classmate for clarification about what a question is asking, but you may *not* discuss possible answers to these questions with each other. These are intended to be done on your own. For each assignment, make sure you consider, and link to, the concepts that were learned in class(es) referenced by the assignment.

ChatGPT Policy: The use of ChatGPT and similar systems is expressly forbidden on these assignments. Doing so risks failure. We want to know what you think, not what ChatGPT thinks.

Note: For all components of your grade, any grading inquiries must be raised within five days after each grade is posted.

Grade Category	Qualitative Description	Grade Symbol
Honors	Indicates a performance which clearly exceeds professional standards and the instructor's expectations for MBA stude	
Satisfactory Plus	Indicates a performance which clearly meets professional standards and falls in the higher range of the instructor's expectations for MBA students	S+
Satisfactory	Indicates a performance which meets professional standard and the instructor's expectations for MBA students	ds S
Low Pass	Indicates a performance which is marginal in relation to professional standards and below the instructor's expectation for MBA students	LP
Fail	Indicates a performance which is clearly below profession standards and warrants loss of credit for the work.	al F

Laptop Policy

The professor may enforce the following policy. Devices that lie flat on the desk are permitted for notetaking during class. No upright laptops are permitted as they are distracting to the students around and behind you. No phone use is permitted.

Code of Conduct for the Course

- 1. You are expected to be prepared, on time, and a participant for all class sessions and activities unless otherwise excused.
- 2. You may not take or share private role instructions for case exercises or other activities when instructed by faculty. In addition, to avoid undermining the educational experiences of your classmates or future classes, please do not discuss the specifics of exercises outside of the classroom.
- 3. To ensure that we have a safe and open learning environment, please keep sensitive information shared during class sessions within the classroom, respecting the privacy and confidence of your classmates.

Syllabus is subject to change at the discretion of the faculty. See Canvas for session-by-session information about the course and assignments.



Analytics II – Fall 2024

Sections 1 and 3

Professor: Praveen Kopalle

praveen.k.kopalle@tuck.dartmouth.edu

Office: Buchanan 105
Telephone: 603-646-3612
Scribe: Mary Durand

Sections 2 and 4

Professor: Prasad Vana

prasad.vana@tuck.dartmouth.edu

Office: Tuck 204
Telephone: 603-646-0463

Scribe: Catherine LaTouche

Academic Coordinators:

For Praveen Kopalle and Prasad Vana: Cindi Mansell (Kopalle) – Geoff Gunning

(Vana)

Course Content and Objectives

Analytics-II is the rigorous and creative use of data and mathematical models to support decision-making. This course will provide you with a background in Descriptive and Predictive Analytics. Descriptive Analytics is focused on summarizing data and statistically understanding what is happening in the data, i.e., how the world works. Based on this understanding, Predictive Analytics uses statistical models to predict what might happen in the future.

The overall goal is to help you become more competent and confident in understanding and using data and in creating analytical models for decision making, both for other courses at Tuck and on the job. We will provide you with a strong background in predictive analytics. and emphasize learning how to be an intelligent "consumer" of analytics. This, in turn, will help you make effective decisions as a manager using predictive analytics. In essence, the objectives of Analytics II are (i) to help you become skilled at applying some common analytics techniques, (ii) to help you learn to be an intelligent consumer of data and analytics-based reports in business settings, and (iii) to encourage a more disciplined thinking process in the way you approach decision problems and use data. We will use sophisticated statistical and predictive analytics methods to understand and anticipate the effects of our actions. These methods include confidence intervals, hypothesis testing, A/B

testing, multiple regression, and supervised and unsupervised machine learning models such as neural networks and cluster analysis. We will apply these methods to problems from all organizational functions including management & strategy, operations, economics, marketing, finance & accounting, and to a variety of industries. In addition, you will become skilled in performing various analyses via hands-on experience using the R statistical programming language.

Required Readings

The assigned readings will be drawn from the following text: *Applied Statistics for Business and Economics: An Essentials Version*, Third Edition, by Allen L. Webster

Course Requirements

A. There are seven homeworks during the course. The homework assignments are included in your course materials. Please upload your completed homework (either as a pdf, excel, word, handwritten etc.) with supporting analysis to Canvas at the beginning of your class session on due dates. These are individual assignments. Please feel free to discuss your solution with your colleagues prior to submission. What you finally submit on Canvas should reflect your understanding of the material in your own words. It is our understanding that what you submit on Canvas is your understanding of the material and not that of your group. These are exercises that will help cement your in-class learning and demonstrate your understanding of the pricing approaches that we discuss in class. Note that Homework 5 (Shelf Space exercise) is a group assignment and not an individual one—only one submission per study group is sufficient. The various course assignments and their due dates are as follows:

Homework 1: Descriptive Statistics, Covariance, and the Normal Distribution Wednesday, October 23, 8:30

Homework 2: Confidence Intervals and Hypothesis Tests Wednesday,

October 30, 8:30am

Homework 3: Simple Regression Wednesday,

November 6, 8:30am

Homework 4: Simple and Multiple Regression Monday, November

11, 8:30am

Homework 5: Allocating Shelf Space (Team Assignment)

Monday, November

25, 8:30am

Homework 6: Dummy Variable Regression Tuesday,

November 26, 8:30am

Homework 7: Based on k-Means Clustering Monday, December

2, 8:30am

Homework assignments are also listed in the day-by-day class schedule below. Assignments and instructions will be available in Canvas.

There will be two exams in this course:

• Exam A: The exam will be available on Thursday, November 14 and will be due on Saturday, November 16 at noon. (This exam will focus on Sessions 1–8).

• Exam B: This take-home exam is available on Friday, December 6 and will be due on Sunday, December 8 at noon. This will focus on Sessions 9–16.

Grading

In calculating your final grade, the components of the class will be weighted as follows to determine an overall score:

Exam A: 35%
Exam B: 35%
Homework Assignments: 20%
Class Participation: 10%

Your final grade will then be assigned according to this score, following Tuck guidelines for core classes.

TA Sessions

Sessions with second-year teaching assistants (TAs) will be held from 6:00-7:30 pm. All TA sessions are optional. No new material will be introduced and you should not feel obliged to attend if you do not feel the need. TA sessions will provide you with an opportunity for you to listen to other students' questions as well as give you a chance to ask your own.

The TA sessions will be held the evening on the same day of each class. For these sessions, TAs will review that day's material and answer questions.

There will also be the following optional review sessions before the exams:

• Exam A review session: Friday, Sept 8, 1:15-2:45 pm

• Exam B review session: Fri., Dec. 6, 9:00-11:00 am

All review sessions will be in person (check your calendars for location) and on Zoom. Meeting ID for TA sessions: 929 5643 8464 Password: woodbury

Studying for the Course

The textbook chapters are easy to read and cover a lot of ground. However, some of the topics are not covered in depth. Class discussions, handouts, and other references will fill these gaps. We expect you to read through the assigned chapters and familiarize yourself with the content before class. The class discussion will be aimed at providing a good understanding of the concepts and their application.

Canvas Preparation, Quizzes, and Review

Some classes will be preceded by a custom set of videos and quizzes that will be available on Canvas. The objective of the videos is for students to learn and apply analytics concepts or review class material. The idea is to use classroom time for more value-added learning. Completing these quizzes will count towards your class participation grade.

Software

The course will introduce you to R/R Studio. We will provide documentation and videos with instructions on how to use these software packages.

Attendance

The Tuck educational experience is co-produced by students and instructors. Your preparation, presence, and active participation are important for its success. In Analytics, attendance is an important part of the class participation grade.

If you must miss a class (e.g., for illness or family emergency), please notify your professor and the class scribe by email before class. The email should include the date and reason for your upcoming absence. In accordance with the Tuck Honor Principle, you are expected to provide forthright, timely, complete, and accurate information about why you need to miss class. If you miss a class, you are responsible for knowing the material that was covered in that class.

It is Tuck policy that missing a class for recruiting activities is not considered an excused absence. It is your responsibility to work with recruiters and career services to avoid these disruptions.

Laptop Policy

We will follow Tuck's laptop policy in this class: students shall not use laptop computers, cellular telephones, or any other electronic communication device in any class session unless explicit permission to do so is granted by the instructor. For special cases in which laptops are needed, faculty will notify students.

Honor Principle

The Tuck Honor Principle represents a contract among students and instructors about behaviors that are appropriate in the learning process. This course is structured to promote learning by a combination of individual and team assignments. This structure encourages certain group interactions because they enable you to use time efficiently or because they improve your understanding of the material.

Your *Individual Assignment* submissions must be your own work. You may consult with your study team members about the material covered in the assignment, but you must generate the homework submission on your own, without copying materials (e.g., Excel files or writeups) from others. You are expected to understand all aspects of your submitted work and may be called upon to explain your work in class.

Both exams are open book, open notes (yours only), and require individual work with no help from other students, the internet, or anybody other than the instructors.

Conversations with second-year students other than the TAs about specific assignments before their due dates are a violation of the Honor Principle. Also, please note that it is a violation of the Honor Principle to use any course materials such as homework assignments, exams, etc. from previous versions of this course unless the instructors provide them to you.

Feel free to use ChatGPT as an additional source of your learning. However, do not rely on it fully because it may not always be accurate. It is a violation of the honor principle to use ChatGPT during the examination period.

Student sharing of course materials outside of our internal Canvas system will be considered a violation of the Tuck Honor Principle.

If situations arise where the application of the Honor Principle is unclear, you should seek clarification from the instructions

Course Schedule

Class	Date and Professors	Торіс	Assignments (all homework assignments are <i>individual assignments</i> , except where noted.)
Predict	tive Analytics		
1.	10/14 Mon.	Normal Distribution	Reading: Webster, Chapter 5, pp. 121-130 Statistical Analysis Using Excel Introduction to R/R-Studio documents and videos
2.	10/16 Wed.	Covariance & Correlation, Variance of Sums	Reading: Covariance and Correlation Canvas: Covariance Preparation Quiz
3.	10/17 Thurs.	Inference: Confidence Intervals	Reading: Webster, Chapter 6, pp. 141-154, Webster, Chapter 7, Confidence Intervals & Sample Size
4.	10/23 Wed.	Inference: p-Values and Hypothesis Testing	Reading: Webster, Chapter 8, pp. 193-200, 206-211 Hypothesis Tests & p-values
5.	10/24 Thurs	Inference: A/B Testing	Homework: Descriptive Statistics, Covariance, and the Normal Distribution Reading: Webster, Chapter 9, pp. 225-229 Testing Differences Between Two Means
6.	10/30 Wed.	Introduction and Statistical Inference in Bivariate Regression	Reading: Webster, Chapter 11, pp. 315-326, 332-343 Homework: Confidence intervals and Hypothesis Tests
7.	10/31 Thurs.	Prediction in Bivariate Regression	Reading: Webster, Chapter 11, pp. 343, 345-349
8.	11/6 Wed.	Multiple Regression and Omitted Variable Bias	Reading: Webster, Chapter 12.1-12.3 Homework: Simple Regression

Course Schedule, Continued

	Course Schedule, Continued				
9.	11/7 Thur.	Omitted Variable Bias, Multi- collinearity	Reading: Webster, Chapter 12.4-12.5		
10.	11/11 Mon	Multi-collinearity, Course Summary	Homework: Simple and Multiple Regression		
	11/13 Weds.	Exam A Review Session	4:45 - 6:15 pm		
	11/14 Thur.	Exam A	Available 11/14 Thurs. at 12pm; due 11/16 Sat. at noon. Take 3 contiguous hours		
	Advanced Analytic	es			
11.	11/18 Mon.	Dummy Variables in Multiple Regression	Reading: Webster, Chapter 12.7		
12.	11/20 Wed.	Dummy Variables in Multiple Regression (cont.)	Reading: Webster, Chapter 12.7		
13.	11/25 Mon.	Optimization and Regression Modeling	Reading: Webster, Chapter 12.8 Homework: Allocating Shelf Space (Team Assignment)		
14.	11/26 Tues.	Unsupervised Machine Learning: Cluster Analysis	Reading: Note on Cluster Analysis Homework: Dummy Variable Regression		
15.	12/2 Mon.	Supervised Machine Learning: Neural Networks	Homework: Based on k-means analysis		
16.	12/4 Wed.	Supervised Machine Learning: Large Language Models	TBA		
	12/6 Fri.	Exam B Review Session	9 to 11am		

9:00 am In class

12/6 Fri.

Exam B



CAPITAL MARKETS Fall 2024

Prof. Franz Hinzen 203 Chase Hall franz.hinzen@tuck.dartmouth.edu

Assistant: Emily Skowfoe

309B Tuck Hall

emily.m.skowfoe@tuck.dartmouth.edu

Prof. Jonathan Lewellen 305 Tuck Hall jon.lewellen@dartmouth.edu

Assistant: Jamie Blanford 309B Tuck Hall

jamie.a.blanford@dartmouth.edu

The capital markets are a critical part of the economy. Firms go to the capital markets to raise funds and manage risks, and individuals go to the capital markets to invest and grow their savings. In this course, we study how the capital markets work and how and why they are important for firms and investors. We will discuss the basics—how are the debt, equity, and derivatives markets organized? how does trading take place?—as well as more advanced topics such as the determinants of interest rates, portfolio selection and risk, the behavior of stock prices, and the pricing and uses of financial derivatives. These topics should be understood by all managers, entrepreneurs, and investors.

Class preparation

Assignment sheets for every class are provided on Canvas. They include a mixture of readings, study questions, and graded homework. You should prepare the assignments **before class** (including the study questions) and be ready to participate actively in the class discussion.

Class slides will be available on Canvas before class (typically by 5pm on the previous day). Hard copies will be distributed in class.

Graded assignments should be completed in your study groups and uploaded to Canvas as **PDF files prior to class (one upload per group)**. Please format your answers to make them easy to read. Much of our discussion in class, and most exam questions, will build directly on the assignments. As such, we encourage you to work on them individually and in groups to ensure you truly understand the answers. Your grade will likely suffer if you do not keep up with the assignments or delegate responsibility to particular group members. Late homework will not be graded.

Attendance

Class attendance is mandatory, and absences for anything except medical reasons and emergencies will impact your final grade.

If you must miss class, please use the "Planned Absence" reporting system to let us know ahead of time. You remain responsible for knowing the material and for helping with group assignments that are due on a day you miss. Otherwise, there is nothing to do to 'make up' a missed class.

Financial Market Updates

Each study group is assigned to present a **5-minute** 'FMU' during the term on a topic related to capital markets. The assignments can be found on Canvas. Presentations should be a **maximum of 5 slides**, and your grade depends in part on finishing in the allotted time. Please upload your slide deck to Canvas by 8:00am and be prepared to present at the start of class. We are happy to review your slides ahead of time if you would like feedback.

Review sessions

We will hold optional Q&A sessions in our usual classrooms on Oct 17, 22, 29 and Nov 12, 19, 25. Prof. Lewellen's sessions are scheduled for 1:30–2:30pm (except Oct 17, when it is 3:00-4:00pm), and Prof. Hinzen's sessions are scheduled for 3:00–4:00pm. You may attend either session.

There will also be a midterm review on Nov 7 and a final review on Dec 5. These are scheduled for 1:30–3:00pm for Prof. Hinzen and 3:20–4:50pm for Prof. Lewellen (both in Georgiopolous). Again, you may attend either session.

Exams

The midterm exam is scheduled for Friday, Nov 8, 9:00am–12:00pm. The final exam is scheduled for Monday, Dec 9, 9:00am–12:30pm. **Exams must be taken on campus at the assigned time**. Room assignments will be posted later.

The exams are 'closed book' except for the formula sheet and spreadsheets we provide and a 1-page, double-sided, handwritten notes page that you may prepare ahead of time. You cannot use any online resources, including ChatGPT or similar systems, during the exams.

Grading

Final grades in Capital Markets are based on class participation (10%), assignments (15%), the midterm exam (30%), and the final exam (45%).

Tuck Honor Code

Needless to say, the faculty take the Honor Code seriously and view it as a critical aspect of the learning environment. The prevalence of group work is consistent with Tuck's philosophy that your classmates are a key part of your education. At the same time, it is essential for you to master the material on your own. Thus, while assignments should be completed in groups, exams must be completed without outside help or the use of online resources. It is also a violation of the Honor Code to use homework answers or exams from previous years or to share course material with outside parties (e.g., posting material to sites like Course Hero).

Course material

All course material—the syllabus, assignment sheets, FMUs, readings, class slides, spreadsheets, review material, HW answers—will be available on Canvas.

The textbook is *Corporate Finance* (13th ed., McGraw-Hill) by Ross, Westerfield, Jaffe, and Jordan. This book will also be used in Corporate Finance in the winter. You may use previous editions of the textbook but please note that page and section numbers will differ slightly.

CAPITAL MARKETS

Schedule

Session	Day	Date	Topic
1	Mon	Oct 14	Introduction to Capital Markets
2	Tues	Oct 15	The Bond Market
3	Thurs	Oct 17	Interest Rate Risk
4	Mon	Oct 21	Term Structure of Interest Rates
5	Tues	Oct 22	Bond Investment Strategies
6	Mon	Oct 28	Stock Valuation
7	Tues	Oct 29	Stock Returns and Volatility
8	Mon	Nov 4	Portfolios
9	Tues	Nov 5	The CAPM
	Fri	Nov 8	Midterm Exam 9:00am – 12:00pm
10	Mon	Nov 11	Cost of Capital
11	Tues	Nov 12	Factor Models
12	Mon	Nov 18	Market Efficiency
13	Tues	Nov 19	Forwards and Futures
14	Mon	Nov 25	Options
15	Mon	Dec 2	Option Pricing
16	Tues	Dec 3	Risk Management
	Mon	Dec 9	Final Exam 9:00am – 12:30pm

Detailed Schedule

Assignment sheets for every class are provided on Canvas. These sheets provide detailed guidance on preparing for class.

Readings marked 'RWJ' refer to chapters in the textbook; readings marked 'Canvas' are available on Canvas.

Class 1 (Mon, Oct 14): Introduction to Capital Markets

Reading

- Canvas: Financial Math
- Canvas: Standard & Poor's Guide to Understanding Money & Investing (excerpt)

Topics

- Introduction to the course
- Introduction to the capital markets
- DCF analysis

Class 2 (Tues, Oct 15): The Bond Market

Reading

- Canvas: Bonds
- RWJ Sections 8.1–8.3

Topics

- Overview of the bond market
- U.S. Treasury bonds
- Price and yield to maturity (YTM)
- Accrued interest
- Bond price quotations

Class 3 (Thurs, Oct 17): Interest Rate Risk

Reading

• Canvas: Immunization 101

- Interest rate risk
- Yields vs. returns
- Macaulay and modified duration
- Immunization

Class 4 (Mon, Oct 21): Term Structure of Interest Rates

Reading

- Canvas: Term Structure of Interest Rates
- RWJ Sections 8.4–8.5

Topics

- Short-term vs. long-term interest rates
- Spot rates vs. yields
- Forward rates
- Expectations Hypothesis

Class 5 (Tues, Oct 22): Bond Investment Strategies

Reading

• Review material from classes 1–4

Topics

- Hedging vs. speculating on interest rates
- Arbitrage and the Law of One Price

Class 6 (Mon, Oct 28): Stock Valuation

Reading

- RWJ Sections 6.2 (skim), 9.1, 9.3, 9.4
- Canvas: Valuing Apple
- Canvas: The truth about what Facebook is really worth
- Canvas: Cantor Fitzgerald Equity Research

Topics

- Dividend discount model
- Free cash flow discount model
- Long-run growth rates and terminal value
- Multiples

Class 7 (Tues, Oct 29): Stock Returns and Volatility

Reading

• RWJ Chapter 10

- Overview of the stock market
- Total returns, excess returns, nominal returns, real returns
- Historical returns and volatility

Class 8 (Mon, Nov 4): Portfolios

Reading

• RWJ Sections 11.1–11.7

Topics

- Expected return and variance of a portfolio
- Diversification
- Optimal portfolios

Class 9 (Tues, Nov 5): The CAPM

Reading

• RWJ Sections 11.8–11.9

Topics

- Diversifiable vs. nondiversifiable risk
- Beta
- Expected returns

Midterm Exam: Friday, Nov 8, 9:00am – 12:00pm

Class 10 (Mon, Nov 11): Cost of Capital

Reading

- RWJ Sections 13.1–13.3, 13.8–13.10
- Canvas: MedPointe Healthcare

Topics

- Using the CAPM
- Leverage and WACC

Class 11 (Tues, Nov 12): Factor Models

Reading

- Canvas: Understanding Risk and Return
- Canvas: Cap M in Crunch Time

- CAPM vs. multifactor models
- Mutual fund performance
- Alpha

Class 12 (Mon, Nov 18): Market Efficiency

Reading

• RWJ Sections 14.2–14.7

Topics

- Efficient markets hypothesis
- Anomalies
- Implications and evidence

Class 13 (Tues, Nov 19): Forwards and Futures

Reading

- RWJ Sections 25.1–25.3
- Canvas: Currency Forward Rates

Topics

- Futures vs. forward contracts
- Margin accounts
- Marking to market
- Forward price
- Covered interest parity

Class 14 (Mon, Nov 25): Options

Reading

• RWJ Sections 22.1–22.6

Topics

- Option terminology
- Strike prices, intrinsic values, and moneyness
- Payoffs and returns

Class 15 (Mon, Dec 2): Option Pricing

Reading

• RWJ Section 22.7–22.8

- Put-call parity
- Binomial option pricing
- Black-Scholes option pricing
- Factors influencing option prices

Class 16 (Tues, Dec 3): Risk Management

Reading

• Review material from classes 13, 14, and 15

Topics:

- Implied volatility
- Managing risk with futures and options
- Hedged vs. unhedged returns
- Costs and benefits of hedging with puts, calls, and futures

Final Exam: Monday, Dec 9, 9:00am – 12:30pm



Marketing Fall 2024

Sections 3 & 4: Mon/Tues, 8:30 – 10:00 am, General Motors/Rosenwald Sections 1 & 2: Mon/Tues, 10:20 – 11:50 am, General Motors/Rosenwald (See course schedule for deviations)

Professor Tami Kim
Sections 2 & 4 (Rosenwald)
Office: Buchanan 104
Office Hours: By appointment
E-mail: tami.kim@tuck.dartmouth.edu

Academic Coordinator: Emily Skowfoe E-mail: emily.m.skowfoe@tuck.dartmouth.edu

Course Scribe: David Corriveau E-mail: david.corriveau@tuck.dartmouth.edu

Professor Jon Kerbs
Sections 1 & 3 (General Motors)
Office: Tuck 312

Office Hours: Tuesdays, 1:00 – 2:30 pm E-mail: jon.w.kerbs@tuck.dartmouth.edu

Academic Coordinator: Laura Cota E-mail: laura.l.cota@tuck.dartmouth.edu

Course Scribe: Maureen Hanley E-mail: maureen.m.hanley@tuck.dartmouth.edu

Note: Please note that the times and topics may change based on class discussion progress and semester flow. The syllabus will be updated online on Canvas as soon as a major change occurs.

Course Overview and Objectives

Why do marketers (and marketing) exist? And how do they impact firm outcomes, above and beyond experts from other functions? First year marketing is designed to provide foundational understanding of the unique contribution marketers make to firm performance. While there is significant variance in how the marketing function is structured from firm to firm, we will introduce you to a general management marketing mindset – one in which marketers drive the strategic direction of the firm to

identify, create, and deliver superior value for consumers, enabling firms to achieve a competitive advantage in the marketplace. We have designed this course to provide you with a framework for understanding marketing's contribution to firm outcomes and a general overview of key concepts related to the value creation process. Because of our limited time together, each class session will focus on a different core marketing concept that transcends across industries to provide you with key, foundational knowledge.

The course framework is split into three modules covering the marketing fundamentals:

- Module 1. Setting a Marketing Strategy
- Module 2. Formulating the Marketing Mix
- Module 3. Executing a Marketing Strategy

The key objectives of the course are to:

- 1. Understand the strategic role of marketing in companies and integrate the customer into business planning.
- 2. Identify and address key marketing issues facing managers.
- 3. Determine market opportunities, design a strategy, and formulate marketing mix decisions.
- 4. Apply frameworks and tools—both qualitative and quantitative—for marketing analyses.
- 5. Develop recommendations and action plans for companies facing difficult marketing decisions through case studies.

Course Materials

1. Required:

- **Course pack**: Electronic versions of course materials will be available on Canvas under the assignments listed for each session (see "Home" view).
- In addition to the materials listed above, the course Canvas site includes announcements, homework assignments, and other supplementary materials. Please check it frequently for updates.
- 2. **Optional:** The course pack on Canvas includes the featured reading materials from the textbook below. The full text is available for your reference in the library.
 - **Background Textbook:** *Marketing Management* (15th edition), Philip Kotler & Kevin Lane Keller. The course pack <u>includes all the featured reading materials</u> from the textbook. Copies are on reserve at Feldberg Library.

Class Participation

Students and instructors co-produce the Tuck educational experience. Much of this course's learning occurs in class, as students share experiences, questions, and analyses with each other. Your preparation, presence, and active participation are important for its success. **Attendance is therefore required, and unexcused absences will negatively impact participation grades.** You cannot make up for a missed class by simply reading lecture notes later. Please expect cold calls; you may be randomly called on to comment on issues, explain concepts, and open case discussions.

It is Tuck policy that missing a class for recruiting activities is <u>not</u> considered an excused absence. It is your responsibility to work with recruiting and career services to avoid these disruptions. Absences may be excused for personal illness, family emergencies, or religious observance. <u>If you are unable to attend class for any of the reasons listed, please use the new planned absence reporting</u>

system to notify us as early as possible, and no later than one day in advance. Late arrivals and early departures are strongly discouraged, and they may negatively impact your attendance record.

NOTE: Class participation grades are <u>not</u> simply a function of <u>how often you speak</u> in class, but <u>how effectively you</u> contribute to class learning, and <u>how thoughtfully you</u> respond to questions.

Case Preparation

Cases are descriptions of real-world business situations that provide opportunities to analyze marketing problems and develop marketing strategies. Each case has been carefully selected to discuss the fundamentals of marketing as laid out in the course framework. You will need to analyze and prepare each case with your respective study group for class discussion. Please carefully study the case, paying attention to the case preparation questions provided on Canvas. Be sure to pay attention to the exhibits, which often contain important data. Effective case analyses not only draw from the case text, but also make connections to key points found in the exhibits (tables, figures, appendixes). In addition, when answering "Yes/No" questions, or developing a recommendation, strong case analyses not only provide a response, but also a rationale for why the response makes sense (and perhaps also why alternatives do not).

Each case provides all the facts that you need to analyze it. The idea is to tackle the case problem from a fresh perspective. You should not find out what happened or bring outside information about the company or the industry beyond what is described in the case. Doing so is a violation of the Honor Code and may have a point-deduction penalty. In the same vein, analyzing the case based on your own personal experiences and opinions rather than case facts and course frameworks will likely deter you from analyzing the case effectively. Such information is often irrelevant and counterproductive for your learning.

1. **Case Write-ups:** For <u>three</u> of the cases, each study group will prepare and submit a write-up addressing *all the discussion questions* assigned for that case. The write-up should be contained within 2 single-spaced pages, written in 11 or 12-point standard font (e.g., TNR, Arial, Calibri) with 1" margins. All supporting quantitative analyses should be included in an appendix, restricted to up to 4 pages.

General case write-up guidelines:

- Provide a coherent, well-organized analysis grounded in course framework, not simply a list of arguments for or against a position.
- Be concise and do not spend time rehashing, quoting, or paraphrasing the facts given in the case. Be as direct as you can in answering the discussion questions.
- Draw connections to exhibits, figures, and tables to enrich your responses. When defending a particular point of view, be specific as to why you argue for that view (and not others), using information from the course and/or the case (rather than your intuition) to back up your assertions.
- Nominate a representative from your study group who will upload the write-up on Canvas on behalf of the group.
- Please make sure that the case write-up submission includes the NetIDs of your study group members, and not the names.

Peer Assessment: You will be assessed by your study group based on your contribution towards group case analyses and session memo discussions at the end of the term. Your individual score will incorporate this peer assessment feedback.

2. **In-class Case Discussion:** In class, my role is to facilitate the discussion, while the direction and quality of the case analysis is the collective responsibility of the class. While you work on the cases as a study group, you will need to also analyze your individual perspective of the case. There will be frequent cold-calling during case discussion, and you should be prepared to share your analysis and perspective. Individual preparedness for class discussion will also enable you to participate in case-related exercises that we may perform during case discussions.

A typical request at the end of a case study is: "What is the right answer?" Keep in mind that, in many business situations, there may not be an "optimal" or "perfect" recommendation; however, there can be more than one "viable" action as well as several ill-considered actions. The goal of the case method is not to prescribe a solution to one specific problem but to thoroughly understand a complex issue from multiple angles, which then helps you construct a sound framework to tackle similar problems in the future.

Guest Speakers

Guest speaker presentations are an integral part of this course. There will be two guest speakers during the term. Each speaker is invited to present on a given course topic and to answer your questions based on their professional experience. Attending guest speaker presentations is mandatory. For each guest speaker session, please review the speaker bio on Canvas as well as any readings associated with it and prepare questions that you may want to ask during the student interaction time.

Course Mentorship

Our class will be supported by several colleagues working as second-year Teaching Assistants, who will assist me with grading. Each study group will also be assigned a TA mentor as indicated in the list below. Please see Canvas for your TA mentor assignment. You are encouraged to reach out to your study group's TA mentor for course related topics and questions. There are no formal TA sessions, however you are recommended to catch up with your assigned mentors freely and informally as and when needed.

Mid-term Home Assignment

The mid-term home assignment is an open-book, open-notes, individually-completed assignment. You may have access to course materials while working on the assignment as some questions may utilize this material. Late submissions will have points deducted. Do not discuss the contents of the assignment with any current or former students once it has been activated until after the assignment due date, which will be noted on Canvas. Doing so would be a violation of the Tuck Academic Honor Code.

Final Exam

The final exam will be held on Saturday, Dec. 7, 9:00-12:00. This is an in-person exam. You may only use the network to access the final exam, materials on Canvas or directly linked to from Canvas (e.g., cases). You may access email only to send emails to yourself (to facilitate uploading of photos) or your instructor. More guidelines will be provided closer to the date.

General Course Expectations and Etiquette

To ensure the best possible learning environment for you and your classmates, please observe the following expectations and etiquette:

- 1. Please be punctual and ready to engage. Late arrivals and early departures are strongly discouraged, as they disrupt the learning environment for your classmates.
- 2. Laptops are not permitted in this course. Tablets are allowed for note-taking and course-related activities only. The instructor will notify you if there are specific instances where laptops are permitted. Please silence and put away your cell phones for the full duration of class.
- 3. Adhere to all aspects of the Tuck Academic Honor Code. Please consult your professor with any questions about how the Honor Code applies in a specific situation.
- 4. Complete group work with your group and do not consult with students in other groups or from previous years' groups. Consulting with previous years' students for any deliverable, and consulting with current or previous years' students for individual deliverables (mid-term assignment or exam), is a Tuck Honor Code violation. Complete individual work on your own.
- 5. Do not use any recording devices during class sessions. Taking pictures of the blackboards is permitted.

Generative AI policy

The use of ChatGPT and similar systems is not allowed in the preparation of the case write-ups, the mid-term assignment, or the final exam. Feeding these tools the course materials (syllabus, articles, chapters, cases, case questions, assignment, exam, instructions) is not allowed either. AI tools are still in early stages, and you might explore how they can aid your comprehension of the course material. But be careful, ChatGPT and similar tools "speak" with great confidence, even when their outputs are incomplete, wrong, or completely fabricated. If you use them in any portion of the course (where it is not forbidden), please acknowledge doing so, attribute proper credit, and include the prompts.

Grading and Evaluation

Individual		
	Class Participation (attendance; participation)	20%
	Mid-term Assignment	20%
	Final Exam	25%
Group		
	Case Write-ups	35%
Total		100%

Please note that re-grades will not be permitted unless there is a calculation error. If a calculation error has occurred in the grading of an assignment or exam, or in other exceptional cases, you will have one week after an assignment has been returned to bring a calculation error to my attention. Please include documentation in support of your position (e.g., a scanned page from the readings with relevant information highlighted).

COURSE SCHEDULE & ASSIGNMENTS DUE

See Canvas for <u>readings</u>, <u>numerical problems</u>, and <u>discussion questions</u> to address before class.

#	Date	Case	Topic	Readings & Deliverables		
	Module 1: Formulating a Marketing Strategy					
1	Monday, 10/14	B&D	Intro to Marketing	• The Black & Decker Corporation: Power Tools Division (595057- PDF-ENG)		
2	Monday, 10/21	Jaguar Land- Rover	Customer Centricity and Intelligence	 Jaguar Land-Rover: Towards a Customer-Centric Organization (IN1440-PDF-ENG) The Explainer: Marketing Myopia (HV1027-AVO-ENG) AATR Model Note 		
3	Tuesday, 10/22	NA	Segmentation, Targeting, and Positioning I	 "A Note on Market Definition, Segmentation, and Targeting" article (UV7286-PDF-ENG) Points-of-Differentiation and Points- of-Parity (Kotler/Keller: Chapter 10 pp. 278-281) "Positioning: The Essence of Marketing Strategy" article (UV1425-PDF-ENG) Cluster Analysis Note 		
4	Tuesday, 10/22 1:30-3:00	Guest speaker: Rachel Amory Attendance required.		TBD		
5	Monday, 10/28	Chase	Segmentation, Targeting, and Positioning II	 Chase Sapphire: Creating a Millennial Cult Brand (518024- PDF-ENG) Customer Lifetime Value (Kotler/Keller: Chapter 5, pp. 138- 142) Quantitative and Case Analyses in Marketing Note Case write-up due before class		
6	Tuesday, 10/29	NA	Branding	 Brand Resonance Model (Kotler/Keller: Chapter 11, pp. 307-308) Brand Portfolio Strategy and Brand Architecture (517021-PDF-ENG) Midterm is posted 		
			Module 2: Formulating the Marketing M	ix		
7	Monday, 11/4 1:30-3:00	Guest speaker: Attendance req		TBD		

8	Tuesday, 11/5	Conjoint	Product I	Conjoint Analysis: Estimating Consumer Preferences (Darden
				Business Publishing; Exercise M- 1002) • "Eager Sellers Stony Buyers" article (R0606F-PDF-ENG) Conjoint exercise due before class Midterm is due by 6pm
9	Tuesday, 11/12	Away	Place I	• Away: Scaling a DTC Brand (520051-PDF-ENG)
10	Wednesday, 11/13	Apex	Product and Place II	Apex Ski Boots (520013-PDF-ENG) Case write-up due before class
11	Tuesday, 11/19	NA	Price	Price Elasticity and Breakeven Cannibalization Rate Note
12	Wednesday, 11/20	Burger king	Promotion	 Can 3G Capital Make Burger King Cool Again? (IN1471-PDF-ENG) "A Refresher on Marketing ROI" article (H03RXF-PDF-ENG)
			Module 3: Executing a Marketing Strates	gy
13	Tuesday, 11/26	Pepsi	Marketing for a Better World	• The Pepsi Refresh Project: A Thirst for Change (512018-PDF-ENG)
14	Tuesday, 12/3	Unilever	Marketing Across Borders	Unilever in Brazil: Marketing Strategies for Low-Income Consumers (IN1471-PDF-ENG) Case write-up due before class
15	Wednesday, 12/4		Course Wrap	Peer assessment due before class
		Final Exam		Final Exam distributed 12/4/24 at 5pm Submit Final Exam by 12/8/24 at 12pm

First Part of Core Strategy - Fall 2024

Note: Core Strategy is divided into two parts. The first part takes place in the Fall, and the second part in the Spring. These are two halves of a single course. You will receive a grade at the end of the second part in the Spring Term This syllabus outlines the details for the first part of Core Strategy.

Section 1 & 3

Prof. Giovanni Gavetti

giovanni.gavetti@tuck.dartmouth.edu Office: Tuck 205D (Strategy Pod)

AC: Carol Millay

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Office: 208 Chase

Classroom: General Motors Scribe: Maureen Hanley

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Section 2 & 4

Prof. Ramon Lecuona

ramon@tuck.dartmouth.edu
Office: Tuck 205B (Strategy Pod)

AC: Rick Rielly

richard.w.rielly.jr@tuck.dartmouth.edu

Office: 304 Woodbury

Classroom: Rosenwald Scribe: David Corriveau

david.corriveau@tuck.dartmouth.edu

Exam: (in-person) Monday, November 11th, 2:00 to 5:00 pm

I. Overview

The first part of Core Strategy is about foundational concepts and frameworks. We will get you acquainted with a series of principles that every strategist should fully grasp. The goal is to help you develop a 'strategic mindset' that allows you to:

- (1) properly understand the broad competitive game companies play;
- (2) grasp how companies can attain and sustain competitive advantage; and
- (3) anticipate and react to disruptions to a company's business.

Anyone who is interested in business, not only those interested in strategy roles, will find this course useful.

II. Our Strategy to teach you Strategy

There is no formula for developing or implementing successful business strategies. There is, however, a vast body of knowledge documenting the necessary (but not sufficient) conditions for a company to achieve a competitive advantage and consistently outperform its rivals. Similarly, over the years, we have also learned a great deal about common strategic mistakes that often get companies into trouble. We have distilled this knowledge into a series of essential principles for the crafting of business strategy.

Without a deep understanding, these basic principles of strategy may seem trite. It is only after engaging deeply with real-world situations that embody these principles that one begins to truly appreciate their relevance. To facilitate this understanding, we have therefore selected a series of cases that showcase these principles and offer the immersion necessary to grasp them fully. We have also assembled a 'toolkit'—a set of frameworks designed to help strategists organize available information and better understand the dynamics at play in specific situations. We will introduce these frameworks, discuss them in class, and provide an opportunity for you to apply them.

The pedagogical foundation of this course is the case method – interactive, case-based discussions that form the core of the learning experience. Cases provide rich information requiring you to apply logic and frameworks to identify the critical issues in a situation. Each case is designed to illustrate how basic strategic principles work in practice. Rather than just defining and explaining these principles, we want you to experience how they manifest themselves in real-life business situations. It is therefore critical that you prepare the case before class and come ready to engage in deep discussions.

Our primary job is to get you to think like a great business strategist. This means pushing you beyond your comfort zone to reflect deeply on the material. If you feel lost at times, do not worry. That is part of the learning process. We will periodically connect the dots to make sure no one falls behind, but we aim to create an environment where the big 'aha' moments come as the product of your own reflections.

III. Grades

No grade for the first part of Core Strategy will appear on your transcript. You will receive a single final grade for the entire course, which will be recorded in the Spring after the second part is completed. However, your work during the first part will still be assessed. We will let you know your Class Participation grade and your grade in the Exam.

Below are the components of your grades for Core Strategy, identifying which ones

Class Participation: 40% of your final grade will be based on class participation. Since the first and the second part have the same number of sessions, your class participation in the first part will count for 50% toward your participation grade. The heavy weight on class participation signals how much we value your involvement in class discussions. What matters most is the quality of your contributions, not the quantity. If speaking up in the moment feels challenging, please let us know, and we can work together to find a strategy that keeps you engaged.

Exam: There will be one exam, at the end of the first part of the course. This exam will account for 25% of your final grade and will consist of short case studies designed to assess your ability to apply the foundational concepts and frameworks covered in the first part of Core Strategy. It will take place on Monday, November 11th, from 2:00 to 5:00 pm. This is an in-person exam, so you will need to be at Tuck to take it.

Group Project: At the end of the second part of the course, you will work in group to solve a real strategy problem for a real company. We will reveal the details of the project in due time. The group project accounts for 35% of your final grade.

As with all core courses, your grade will follow the distribution guidelines set by the MBAPO.

IV. Rules of Engagement

Missing Class: We understand that the Fall term can be a busy time, especially with recruitment activities. In fact, one of the reasons we've split the class is to give you more flexibility during this period. While we aim to be as accommodating as possible, it is important that you keep up with the course content. Our attendance policy is straightforward: you cannot receive credit if you miss more than one session in each part of Core Strategy. This means you can miss one class during the first part and one during the second part. Of course, exceptions will be made for chronic health issues or emergencies. If you do need to miss a class, please notify us using the Planned Absence System rolled out by the MBAPO.

Timeliness: Both of us come from cultures where people often run late. While that may be a slight exaggeration, it is one of the reasons we now live elsewhere. In all seriousness, we start class on time and strongly dislike tardiness (and that's no exaggeration).

A.I. Use: Not allowing A.I. in your learning experience would be outdated. We see A.I. as a valuable tool for research and writing, but not a replacement for your own critical thinking. If you rely on GPT or similar tools to answer the case questions for you, you might have something to contribute to class the next day, but you won't learn as much as if you work through the material yourself. It's like having a robot work out for you – the robot gets stronger, not you. Learning strategy requires effort, and there are little shortcuts. So, feel free to use A.I. to complement your case preparation, but not as a substitute for your thinking. The use of A.I. tools is not allowed during exams.

Ethics (academic and personal): We live and die by Tuck's Ethics and Honor Code.

V. Course Outline

The first part of Core Strategy consists of 8 sessions spread over 4 weeks.

Week 1: Introduction

Day 1 (October 15th): Competitive Landscape - Note: This is a two-hour class.

Objective: Provide a glimpse into the case method and some of the core ideas of the course.

Case: Cola Wars Continue: Coke and Pepsi in 2010

Day 2 (October 16th): What is Strategy?

Objectives: Introduce key concepts. Provide an overview of what will be covered during the first part of core strategy. Discuss course calendar, grading, and lay out the rules for engagement.

Week 2: Theory of Competitive Advantage I

Day 3 (October 23rd): Positioning: Differentiation

Objective: Understand the logic of a differentiation play.

Case: Edward Jones

Day 4 (October 24th): *Positioning: Cost Leadership* Objective: Understand the logic of cost leadership.

Case: Walmart

Week 3: Theory of Competitive Advantage II

Day 5 (October 30th): Value Nets and Complements

Objective: Understanding the importance of properly mapping your competitive landscape.

Case: Nintendo

Day 6 (October 31st): Value Nets and Ecosystems

Objective: A second pass on the importance of mapping your competitive landscape.

Case: Apple

Week 4: Practice

Day 7 (November 4th): Platform Strategy

Objective: You will take on the role of a consulting team, providing strategic advice to the CEO of 'X' (formerly Twitter). Using all the concepts learned throughout the course, you will work with your team to produce comprehensive strategy for this digital platform.

Case: From Twitter to X

Day 8 (November 6th): *Strategic Innovation* - **Note:** This is a two-hour class that will be held in Georgopoulos.

Objective: You will take on the role of a founding team, responsible for creating a new business centered around a breakthrough offering in the education space. Drawing on the concepts learned throughout the course, you and your team will develop and present a strategic plan for the new venture.

Case: Education



Corporate Finance

Syllabus - Winter Term 2024 Class Days: Monday & Tuesday

Felipe Severino
203A Tuck
Felipe.severino@tuck.dartmouth.edu
Office Hours: by appointment

Katharina Lewellen
107 Buchanan
k.lewellen@dartmouth.edu
Office Hours: by appointment

Sections 1 & 3
General Motors

Sections 2 & 4
Rosenwald

Objectives

This course develops basic principles of corporate finance and provides practical tools for financial decision making and valuation. The course focuses on two broad topics:

- 1. **Financial Policy:** In Part I, we will learn how to forecast a company's need for external financing, be it debt or equity. We will then consider different sources of financing, analyze their potential costs and benefits, and learn how to think about the best financing mix for a firm.
- 2. Valuation: In Part II, we will develop the tools needed for valuing investment projects, including the estimation of relevant project cash flows, estimating the cost of capital (discount rate), and dealing with risk. We will then use these tools as a basis for selecting investment projects and valuing companies.

Teaching Methods

We will develop the main insights of corporate finance theory but emphasize the application of the theory to real business decisions. Each session will involve class discussion. In some instances, discussion will be centered on lectures; in others it will be centered on a business case. Students are expected to read and prepare all cases, come to class, and participate in class discussion. Student participation is critical to the success of the course.

Prerequisites

Students must be familiar with the material covered in Accounting and Capital Markets, including proforma statements, the CAPM, and basic option pricing theory.

Academic Coordinators

Marisue Valentine, <u>marisue.b.valentine@tuck.dartmouth.edu</u> 646-0795 (Professor Lewellen) Geoff Gunning, <u>geoff.gunning@tuck.dartmouth.edu</u>, 646-9283 (Professor Severino)

Review Sessions

There will be a midterm review session on Thursday, February 8, 5:10-6:40pm. Final review sessions will be divided by sections, with Sections 2&4 on Tuesday, February 28, 5:10-6:40pm, and Sections 1&3 on Thursday, March 7th, 5:10-6:40pm. Additional review sessions will be scheduled as needed with times and locations posted on Canvas.

Readings/Books

Material for the course—the syllabus, case and article readings, class slides, spreadsheets, etc.—will be available on the Corporate Finance page in Canvas.

The **required** textbook is: *Corporate Finance*, Ross, Stephen A., Randolph W. Westerfield and Jeffrey Jaffe, 12th edition, Irwin/McGraw-Hill (RWJ). Students should already have this textbook, as it was previously used in the Capital Markets course. This textbook will also be on reserve at Feldberg Library.

There is also an **optional** textbook: *Analysis for Financial Management*, Robert C. Higgins, 12th edition, Irwin/McGraw-Hill (RH). This book provides a more basic treatment of the course topics than RWJ. One copy will be on reserve in Feldberg Library.

Students unfamiliar with Corporate Finance may consider buying a dictionary such as: *Dictionary of Finance and Investment Terms (Barron's Financial Guides)*, Downes, John, Jordan Elliot Goodman, Barrons Educational Series. Campbell R. Harvey's "Hypertextual Finance Glossary" (http://www.duke.edu/~charvey/Classes/wpg/glossary.htm) is also a very valuable resource.

Requirements/Grading

There will be a midterm exam on Friday, February 9. You will have 1.5 hours to complete this exam, starting at 8:30 am. There will also be a final exam on Friday, March 8. You will have two continuous hours to complete this exam, starting at 8:30 am. The midterm and final exams will take place in assigned classrooms. Classroom allocations will be announced closer to the date.

Your grade for the course will be computed based on the following weighting:

Case write-ups: 10%Class participation: 15%

• Project: 15%

Midterm exam: 30%Final exam: 30%

Case Write-ups

For each business case, you will be required to provide written answers to a set of guideline questions. Students should work with members of their regular study group and submit a two-page memorandum with answers to the guideline questions. Each student is expected to be familiar with the case, to understand his or her group's analysis and conclusions, and be ready to answer questions when cold-called.

Figuring out how to "crack" the case may take you some time. The process of figuring out what the relevant information is and which of the many ideas discussed in class or in the textbook are applicable to the case is an essential component of learning through the case method. You will get better with practice. Please don't be discouraged if your answers to the guideline questions are wrong or if class discussion moves beyond the study questions.

The memorandums should be typed and double-spaced. They should be written as if you were making a presentation to your business colleagues. Even though you will probably use Excel to work up most of your calculations, your memorandums should be written in a way that does not require the reader to have access to your Excel file to understand your analysis of the case. The two-page limit is for text only. You may attach as many numerical calculations as you wish. Each write-up is due at the beginning of class on the day to which it is assigned. Each student should retain a copy for reference during class. Case memorandums will not be accepted after class has met.

Project

The valuation project is a larger group assignment with four deliverables, culminating in class presentations. The due dates for the deliverables are listed in the "Course Outline in Brief" table on page 6, and the guidelines for the deliverables are on page 7.

Pre-class Tutorials

There will be four pre-class tutorials that consist of a short video and one or more diagnostic questions. The goal of the tutorials is to help you learn the material efficiently at your own pace. If you do not have a background in corporate finance, please watch the video before attempting to answer the questions. If you do have a corporate finance background, feel free to answer the questions without watching the video if desired. Regardless of your background, please complete the tutorials prior to the associated class session. We will not go over the material presented in the tutorials directly, but our class discussions will build on the tutorial material.

Practice Problems

For every topic, we will post a set of practice problems on Canvas. These problems will not be graded, but students are encouraged to work through them on their own to reinforce the main concepts of the course. Additional practice problems from the RWJ textbook are listed in OPTIONAL_HOMEWORK_PROBLEMS.pdf posted on Canvas. Solutions for these problems are available in the RWJ Solutions Manual that will be on reserve in Feldberg library.

Class Participation

Class participation is 15% of your grade. You are required to attend the course section to which you are assigned. Any unexcused absence will result in a failing class-participation grade for that day. You should come to each class on time and be prepared to discuss that day's case assignment or pre-class tutorial

questions. There will be cold calling on a daily basis. If you are unprepared to speak when called upon, it is better to "pass" than to sidetrack class discussion with an uninformed answer.

Winter Core Course Absence Policy

Each of the winter courses weights class participation differently, but the following policies are consistent across both of your winter core classes.

Class Absences. You are expected to provide forthright, timely, complete, and accurate information in the event that you need to miss a class. Please keep in mind that any information that you send your professors about your absence is subject to the Tuck Academic Honor Principle.

1. **Absences for interviews.** It is Tuck School policy that missing a class for interviews is NOT excused. It is your responsibility to work with recruiters and Career Services to avoid these disruptions. However, we appreciate the importance of your job search and recognize that in some cases conflict with recruiting is unavoidable.

If a company provides an interview time that conflicts with a class, you should let the recruiter know about the conflict and ask if a different time is possible. If you must miss a class session for an interview, it is your responsibility to notify your professor, your professor's academic coordinator, and the class scribe by email well in advance of the class with the details of the interview time, location and interviewer contact information. Failure to do so in a timely manner will result in an unexcused absence for the class.

2. **Illness and emergency.** In the event of illness or family emergency, it is again your responsibility to notify your professor, academic coordinator, and scribe as soon as possible. Failure to do so will result in an unexcused absence.

Our expectation is that you will be **in-person in the classroom**, in order to be counted as present for a class session.

Students with two unexcused absences will receive an automatic grade reduction for the course. Students with more than two unexcused absences will receive a failing grade for the course.

Midterm and Final Exams

Documented evidence that you were ill or had a serious emergency at the scheduled time of an exam is the only valid excuse for missing an exam.

Both the midterm and final exams are closed book, but students may use a set of formula sheets, which the instructors will prepare in advance and make available one week prior to each test. Students may use hand-held calculators or laptop computers while taking exams, but laptop computers may be used for making calculations only.

Honor Code

In every aspect of the course, students are required to adhere to the standards of conduct as stated in the Tuck School Academic Honor Principle. Note that some of the cases and homework assignments used in this class may have been used before at Tuck or other institutions. You may not consult with students

previously enrolled in this class, or use their class notes or other materials that were otherwise provided in the past. Moreover, you may not use material or solutions from other institutions (e.g. posted on the Internet), unless otherwise instructed in class for a particular assignment.

Re-Grades

If you believe there was a mistake in the grading of your exam, *within one week* following the return of the exam, submit the original exam and a separate *written explanation* of the points of contention. If the re-grade request is made after one week or without an accompanying written explanation, no re-grade will be given. There are no exceptions to this rule. All re-grade decisions are final. The professor reserves the right to correct all mistakes made grading an exam submitted for a re-grade.

COURSE OUTLINE IN BRIEF

(Subject to small adjustments) Changes to this calendar will be available on Canvas.

	Date	Topic	Assignment*	Tutorial	Project**
1	Tue., Jan 16	Introduction			
	Wed., Jan 17	Case: Gilbert Lumber	Gilbert		
					Pick a Co
2	Mon., Jan 22	Capital Structure 1: MM Theorem		MM	
	Tue., Jan 23	Capital Structure 2: Taxes & Distress		Taxes	
					Strategy
3	Mon., Jan 29	Case: A New Financial Policy at SM	Swedish Match		
	Tue., Jan 30	Case: Paramount and current examples	Paramount***		
4	Mon., Feb 5	Capital Structure 3: Signaling			
	Tue., Feb 6	Free Cash Flow			
	Fri., Feb 9	Midterm Exam			
5	Mon., Feb 12	Speaker: Timothy Koller, McKinsey			
	Tue., Feb 13	Case: Diamond Chemicals	Diamond		
					Forecasts
6	Mon., Feb 19	Case: Cost of Capital at Ally	Ally		
	Tue., Feb. 20	WACC & APV		WACC	
7	Mon., Feb 26	Student Presentations			Valuation
	Tue., Feb. 27	Real Options		Options	
8	Mon., Mar. 4	Case: Interco	Interco		
	Tue., Mar. 5	Mini case and review	Explora		
	Fri., Mar 8	Final Exam			

^{*} Assignments (other than Gilbert) are due at 8:00 pm the evening before class. Gilbert is due 8:30 am on the day of class.

^{**} Project deliverables 'Pick a Company,' 'Strategy' and 'Forecasts' are due on Fridays of weeks 1, 2, and 5 (by the end of the day). The 'Valuation' deliverable is due at 8:00 pm on the evening before Student Presentations.

^{***} Discussion of recent bankruptcies: two volunteer study groups.

Project Guidelines

The valuation project is a group assignment with four deliverables, culminating in class presentations. The due dates for the deliverables are listed in the "Course Outline in Brief" table on page 6:

- 1) **Pick a company**: rank the three companies provided in the first class session from 1 through 3, indicating your preference for which of them you would like to analyze and value with your study group (rank 1 indicates your top choice). We will do our best to accommodate everyone's preferences.
- 2) **Strategy**: Using a framework (frameworks) you learned in your strategy and/or marketing classes, analyze your company's business, competition, and strategy and submit the summary of your analysis on 2 to 3 PowerPoint slides. The analysis will be the basis for the cash flow forecasts you will build later in the course.
- 3) **Forecasts**: Forecast your company's Free Cash Flows (FCFs) using the framework you learned in this course. You can also use any tools (including template spreadsheets) you learned in your accounting class. We recommend a forecasting horizon of 5 years, but it can be longer if you think that more time is needed for the company to reach 'steady-state' growth. Use information from the company's past financial statements as a baseline for your forecasts (we recommend examining at least the last three fiscal years). Make assumptions about revenue growth, profit margins, etc. based on the analysis you prepared for the 'Strategy' part of the project. This week's deliverable is a spreadsheet containing your forecasts (worksheet 1) and the historical balance sheets and income statements for the past three years (worksheets 2 and 3). In worksheet 1, include a text box explaining the key assumptions behind your forecasts.
- 4) **Valuation**: Value the company using the framework you learned in this course. This will involve estimating the terminal value, discount rate, enterprise value, equity value, and price per share. For the discount rate, you can use a beta estimate from Yahoo Finance (or a similar source), market risk premium of 5%, and a current long-term treasury yield.

Your deliverable for this week is a PowerPoint presentation that includes the 'Strategy' slides and additional 4-5 slides explaining your entire DCF analysis (this should include 1-2 slides explaining the FCF forecasts you submitted earlier). Each group should be prepared to explain their modeling choices, including assumptions about cash flows, terminal values, and discount rates. The cash flow assumptions should be motivated by the analysis in the 'Strategy' slides. If your estimated price per share differs significantly from the current market price, be prepared to explain why you believe that the firm is undervalued or overvalued.

We will select three groups in each section to present their analysis to the potential 'investors' in the audience. The remaining groups (working on the same company) will play the role of the investors and will ask critical questions during the presentation.

COURSE OUTLINE

I: FINANCIAL POLICY

Tuesday, January 16

Session 1: Introduction

Wednesday, January 17

Session 2: Case on Financial Planning

Case:

Gilbert Lumber Co., Rogers, Steven and Kenneth Cooper. Boston, MA: Harvard Business School Publishing, 2015. Case No. 9-315-137.

Required Reading:

- 1. RWJ, "Financial Statements Analysis and Financial Models," Chapter 3, pages 42-74.
- 2. RWJ, "Short-Term Finance and Planning," Chapter 26 (sections 1-2), pages 795-804.

Optional Reading:

- 1. RH, "Evaluating Financial Performance," Chapter 2, pages 35-83.
- 2. RH, "Financial Forecasting," Chapter 3, pages 85-118.
- 3. RH, "Managing Growth," Chapter 4, pages 120-145.

Project Deliverable: "Pick a Company" due on Friday, January 19th

Monday, January 22

Session 3: Capital Structure 1: Modigliani-Miller Theorem

Required:

RWJ, "Capital Structure: Basic Concepts," Chapter 16 (1-4), pages 487-503. Tutorial on Modigliani-Miller

Background Reading:

RWJ, "Long Term Financing: An Introduction," Chapter 15, pages 468-483.

Optional Reading:

RH, Chapter 6: "The Financing Decision," pages 191-223.

Tuesday, January 23

Session 4: Capital Structure 2: Taxes & Distress

Required:

RWJ, "Capital Structure: Basic Concepts," Chapter 16 (section 5 up to Fig. 16.5), pages 503-507 and "Capital Structure: Limits to the Use of Debt," Chapter 17 (sections 1-4), pages 519-531.

Tutorial on Taxes and Capital Structure

Project Deliverable: "Strategy" due on Friday, January 26th

Monday, January 29

Session 5: Case on taxes

Case:

A New Financial Policy at Swedish Match, Becker, Bo and Michael Norris. Boston, MA: Harvard Business School Publishing, 2013. Case No. 9-212-017.

Tuesday, January 30

Session 6: Case on financial distress and current examples

Case:

Paramount Equipment, Inc., Carliss Baldwin, Harvard Business School Publishing, 2013. Brief Case No. 9-914-557.

Monday, February 5

Session 7: Capital Structure 3: Signaling

Required Reading:

RWJ, "Capital Structure: Limits to the Use of Debt," Chapter 17 (sections 5-7), pages 531-539.

Tuesday, February 6

Session 8: Free Cash Flows

Required Reading:

RWJ, "Making Capital Investment Decisions," Chapter 6 (sections 1-4), pages 169-187.

Review Reading:

RWJ, "Discounted Cash Flow Valuation," Chapter 4, pages 85-119.

Friday, February 9

MIDTERM EXAM: to be completed on Canvas within a 1.5-hour window (open at 8:00 am)

II: VALUATION

Monday February 12

Session 9: **Guest Speaker:** Tim Koller, McKinsey (class will be held in Georgiopoulos and will be combined sections at 8:30am and then at 10:20am)

Tuesday, February 13

Session 10: Case on Free Cash Flows

Case:

Diamond Chemicals PLC (A): The Merseyside Project, Bruner, Robert. Charlottesville, VA: University of Virginia Darden Business Publishing, 2001. Case No. UVA-F-1351.

Required Reading:

RWJ, "Net Present Value and Other Investment Rules," Chapter 5, pages 133-157.

Project Deliverable: "Forecasts" due on Friday, February 16th

Monday, February 19

Session 11: Case on Cost of Capital

Case:

Cost of Capital at Ally

Required Reading:

RWJ, "Risk, Cost of Capital, and Valuation," Chapter 13, (sections 1-5), pages 393-406.

Background Reading:

RWJ, "Return and Risk: The Capital-Asset-Pricing Model (CAPM)," Chapter 11, pages 328-360.

Tuesday, February 20

Session 12: WACC and APV

Required:

RWJ, "Valuation and Capital Budgeting for the Levered Firm," Chapter 18, pages 551-566.

Tutorial on WACC

RWJ, "Risk, Cost of Capital and Valuation," Chapter 13, (sections 6-10) pages 406-417.

Optional Reading:

RH, "Discounted Cash Flow Techniques," Chapter 7, pages 231-265.

Monday, February 26

Session 13: Student Presentations

Project Deliverable: "Valuation" PowerPoint slides due on Sunday, February 25th, 8:00 pm

Tuesday, February 27

Session 14: Real Options

Required Reading:

RWJ, Risk Analysis, Real Options, and Capital Budgeting, Chapter 7, pages 205-213 and 218-224.

Tutorial on Options

Monday, March 4

Session 15: Valuing a Company: Special Issues

Case:

Interco, Roth, Susan L. and Scott P. Mason. Boston MA: Harvard Business School Publishing, 1991. Case No 9-291-033

Tuesday, March 5

Session 16: Mini case and review (case to be distributed at a later date)

Friday, March 8

FINAL EXAM: to be completed on Canvas within a 2-hour window (open at 8:00 am)

Tuck School of Business at Dartmouth Global Economics for Managers Winter Term 2024

Professor Emily Blanchard
115 Buchanan, 6-8962
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Office Hours:

Typically on Tuesdays from 3:00-4:00p.m.

Head Teaching Assistant:

Sam Sherman T'24

Course Objectives

Global Economics for Managers will expand your knowledge of economics in two directions. First, we expand the scope of inquiry to cover the economics of the nation in a global economy. This portion of the course will cover international economics and macroeconomics. We will study the larger economic forces that shape production, trade flows, capital flows, interest rates, exchange rates, and other variables that create the global economic landscape. Second, we will analyze firm decisions in the face of these global forces, i.e., international microeconomics. This part of the course will apply the tools of microeconomics and international economics to illustrate how globalization influences performance, strategy, and policy within firms. The ultimate objective is to help you develop a framework for analyzing both opportunities and risks in a global economic environment.

Course Grading

Dates of your graded assignments and their contribution to your overall grade are shown below.

Activity	Due Date	Weight
Midterm (due by 8:00AM)	Friday, Feb 2	20%
(Available in Canvas Wedne	sday, Jan 31 beginning at	1:00PM.)
Group Case Write-Up #1	Tuesday, Feb 13	10%
Group Case Write-Up #2	Monday, Mar 4	10%
Final Exam (due by 1:30PM)	Thursday, Mar 7	50%
(Available in Canvas Tuesda	y, Mar 5 beginning at 1:3	0PM.)
Class Engagement		10%

Required Text

The Choice: A Fable of Free Trade and Protectionism, Russell D. Roberts, Prentice-Hall, revised and updated Third Edition, 2006.

Attendance and Class Participation

Class participation is 10% of your grade. You are **required** to attend the course section to which you are assigned. Attendance is a basic pre-requisite for positive class engagement, and students who acquire more than two unexcused absences will receive a failing grade for the course (see the syllabus section on "Absence Policy"). Further information on how class engagement will be scored will be provided on the first day of class.

You should come to each class on time and prepared to discuss that day's assigned discussion questions, which are based on each day's readings. There will be cold calling on a daily basis. If you are unprepared to speak when called upon, it is better to "pass" than to sidetrack class discussion with an uninformed answer.

Winter Core Course Absence Policy

Each of the winter courses weights class participation differently, but the following policies are consistent across both of your winter core classes.

Class Absences. You are expected to provide forthright, timely, complete, and accurate information in the event that you need to miss a class. Please keep in mind that any information that you send your professors about your absence is subject to the Tuck Academic Honor Principle.

1. **Absences for Interviews.** It is Tuck School policy that missing a class for interviews is NOT excused. It is your responsibility to work with recruiters and Career Services to avoid these disruptions. However, we appreciate the importance of your job search and recognize that in some cases conflict with recruiting is unavoidable.

If a company provides an interview time that conflicts with a class, you should let the recruiter know of the clash and ask if a different time is possible. After you have exhausted such enquiries, if you must miss a class session for an interview, then you must notify your professor, your professor's academic coordinator, and the class scribe by email well in advance of the class you will be missing with exact details of the interview time, location and interviewer contact information. Failure to do so in a timely manner will result in an unexcused absence for the class.

2. **Illness and emergency.** In the event of illness or family emergency, it is again your responsibility to notify your professor, AC, and scribe as soon as possible. Failure to do so will result in an unexcused absence.

Our expectation is that you will be **in-person in the classroom**, in order to be counted as present for a class session.

Students with two unexcused absences will receive an automatic grade reduction for the course. Students with more than two unexcused absences will receive a failing grade for the course.

Weekly Memos, Course Structure, and Course Outline

In advance of each week (typically by Thursday afternoon), the *weekly memo* for the course will be posted in Canvas. Each weekly memo will provide a guide to the upcoming week's topics, discussion questions, and assignments. *These weekly memos should be considered the "official record" of what is covered in GEM*.

The *course outline* below provides a guide to the topics covered in the course meetings. Preparation for each topic includes articles to **read** and discussion questions to **answer** before the live class session begins. You should prepare responses to the discussion questions (which will be posted in the weekly memos) with your study groups *in advance* of the live class session. We have also included (optional) pre-recorded videos which will be made available to you after class; you may watch these to reinforce key concepts. In the list of readings below, the numbered "BBCKS" chapters refer to the draft chapters of the "textbook", *Global Economics for Managers* (by Andrew Bernard, Emily Blanchard, Davin Chor, Michael Knetter, and Matthew Slaughter). All chapters will be posted in Canvas.

Weekly Question-and-Answer, Problem-Solving Sessions

Each week, on either Monday or Tuesday evening, a pair of TAs will be available for a one-hour window to assist students with problem sets that address basic concepts for the class. On Tuesday evenings, our head teaching assistant, Sam Sherman T'24, will conduct a one-hour question-and-answer session covering all material from the course thus far. All of these sessions are optional, not required. The exact days, times, and location of these sessions are subject to change and will be finalized later in coordination with the TAs. Final guidance on these and all other GEM scheduling matters will appear in the weekly memos and will be highlighted as needed at the start of class each day.

The Academic Honor Principle

We take the Tuck Academic Honor Principle seriously and we have very clear policies for GEM.

- In preparing for class or exams, you should not use materials from any previous offering of this course. This restriction extends to case-related information obtained from other sources. Because the class meets in multiple sections, there should be no communication among sections until all sections have met. After that, of course, full flow of ideas is encouraged.
- Midterm and Final Exams. You must do your own work on each of these exams. You may use only materials that have been explicitly authorized in advance. If you wish to use group assignments during the final exam, you must have your own copy in advance. During both exams, no sharing or discussion of any material is permitted. Failure to turn in either exam on time will result in a failing grade for the course.
- Cases. You should work in your assigned study groups and when required, hand in a single set of answers as a group. Only those who contribute approximately equally to the preparation of a group homework assignment may take credit for it. This does not mean that everyone's ideas must be included. It means that everyone should contribute about equally to the overall process. In all case assignments, you should not go beyond the case in your quest for information. The case provides all the information that should be used. Your group's case write-ups (one per group) must be turned in at the start of your section's assigned class time on February 13 and March 4.
- *Class Discussion*. You should prepare for class discussion each day with your study group, but you must answer independently in class.
- ChatGPT and other AI-driven tools. The use of ChatGPT and similar systems is expressly forbidden on the midterm exam and the final exam.
- If You Are Unsure. Finally and most importantly, you should recognize that the principal ingredient in the success of the Academic Honor Principle is good faith among all parties. From time to time, situations are bound to arise in which the application of the Honor Principle is unclear. In such cases, please contact your professor for clarification.

1. Globalization and the Closed-Economy Benchmark (Tuesday, January 16)

[Note: One-day shift in class meetings this week due to observance of Martin Luther King Day.]

<u>Key Topics</u>: economic integration; economic paradigm; production possibilities: community indifference curve; opportunity cost; equilibrium; labor productivity; relative price

Daily Briefing: US Jobless Claims (Released January 18)

Readings:

- 1. BBCKS, Chapter 2: Resource Allocation in a Closed Economy.
- 2. Paul Krugman, "The Accidental Theorist," *Slate* (on-line magazine), January 23, 1997.

Watch: (optional) The Closed Economy Benchmark

2. International Trade: The Basic Intuition and Theory (Wednesday, January 17)

Key Topics: absolute advantage; comparative advantage; gains from trade

<u>Daily Briefing</u>: US Employment situation (Released February 2)

Readings:

- 1. BBCKS, Chapter 3: International Trade in Goods and Services.
- 2. "Outsource Your Way to Success," The New York Times, November 5, 2013
- 3. "Not So Absolutely Fabulous," *The Economist*, November 4, 1995.
- 4. "The World is in the Grip of a Manufacturing Delusion," *The Economist*, July 13, 2023.

<u>Watch</u>: (optional) International Trade I: Basic Intuition and Theory (optional) <u>BBC</u>: The Community That Trades by Barter Instead of Money

3. International Trade: Is Free Trade the Best Policy? (Monday, January 22)

[Note: Back to regular Monday-Tuesday weekly programming.]

<u>Key Topics</u>: protectionism; national security; infant-industry protection; strategic industry; antidumping; fair trade

<u>Daily Briefing</u>: Michigan Consumer Sentiment (Released February 2)

Readings:

1. *The Choice: A Fable of Free Trade and Protectionism.* Russell D. Roberts, Prentice-Hall, revised and updated Third Edition, 2006.

Watch: No Video for Today

4. International Trade: Trade Deficits and Trade Over Time (Tuesday, January 23)

<u>Key Topics</u>: GNP, GDP, and their components; current-account and capital-account balances; balance of payments; national savings; real interest rate

<u>Daily Briefing</u>: China Manufacturing Purchasing Managers' Index (Released End-January)

Readings:

1. *The Choice: A Fable of Free Trade and Protectionism.* Russell D. Roberts, Prentice-Hall, revised and updated Third Edition, 2006.

Watch: (optional) International Trade II: The Two-Period Open Economy Model

5. Are Current-Account Deficits and Global Imbalances a Problem? (Monday, January 29)

Key Topics: Trade over time; current account; capital account, the global capital-markets crisis

<u>Daily Briefing</u>: US GDP (Released February 28)

Readings:

- 1. BBCKS, Chapter 4: International Trade in Capital.
- 2. "Surprising Truths about Trade Deficits," *The New York Times*, 5 October 2018.
- 3. "Sustaining the Unsustainable," *The Economist*, March 15, 2007.
- 4. "Global Imbalances: Recent Developments and Prospects," transcript of speech by Federal Reserve Chairman Ben S. Bernanke, at the Bundesbank Lecture, September 11, 2007.

Watch: (optional) The OEIS Identity

6. Money, Prices, Interest Rates, and Exchange Rates in the Long Run (Tuesday, January 30)

<u>Key Topics</u>: inflation; nominal interest rate; real interest rate; money supply; money demand; purchasing power parity

Daily Briefing: US Consumer Price Index (released February 13)

Readings:

- 1. BBCKS, Chapter 5: The Role of Money in the Long Run.
- 2. "How Fast Are Prices Skyrocketing in Venezuela? See Exhibit A: The Egg," *The Wall Street Journal*, February 25, 2018
- 3. "How does America Calculate Inflation?" *The Economist*, February 10, 2022.
- 4. "The Dollar is Now Better Value, says the Big Mac Index," *The Economist*, August 3, 2023. Optional interactive tool: http://www.economist.com/content/big-mac-index

Watch: (optional) The Quantity Theory of Money; PPP (Yeah You Know Me)

MIDTERM due by 8.00am Friday, February 2 (Exam available on Canvas starting at 1pm on Wednesday, January 31)

** EXAM MAY NOT BE TAKEN DURING ANY OTHER CLASS TIME **

7. Economic Growth and Business Cycles (Monday, February 5)

Key Topics: productivity; capital accumulation; labor-force growth; aggregate demand

Daily Briefing: U.S. Productivity (Released March 7)

Readings:

- 1. BBCKS, Chapter 6: Economic Growth in the Long Run, Sections 6.1-6.3
- 2. BBCKS, Chapter 7: The Short Run Behavior of Output, Sections 7.1, 7.2
- 3. "A Productivity Primer," *The Economist*, November 4, 2004.
- 4. P. Krugman, "How Fast Can the Economy Grow?" *Harvard Business Review*, July/Aug, 1997.
- 5. "Productivity has Grown Faster in Western Europe than in America," *The Economist*, October 4, 2023.

Watch: No Video for Today

8. Monetary Policy (Tuesday, February 6)

<u>Key Topics</u>: money supply; interest rates; unemployment/inflation tradeoffs; central-bank independence and policy goals

Daily Briefing: U.S. Federal Reserve Open Market Committee Meeting (Released March 19-20)

Readings:

- 1. BBCKS, Chapter 8: Monetary Policy.
- 2. "The Federal Reserve Balance Sheet: An Update," transcript of speech by Federal Reserve Chairman Ben S. Bernanke, at the Federal Reserve Board Conference on Key Developments in Monetary Policy, October 8, 2009.
- 3. "Fed Extends Pause on Rate Hikes but Keeps Door Open to Moving Higher," *The Wall Street Journal*, November 1, 2023.
- 4. "Investors Must Prepare for Sustained Higher Inflation," The Economist, June 2023.

Watch: (optional) Monetary Policy Basics (optional) "Why do Central Banks Raise Interest Rates?" The Economist Films

9. Fiscal Policy (Monday, February 12)

Key Topics: taxes, spending, intertemporal government budget constraint, crowding out, real interest rates

<u>Daily Briefing</u>: Bank of England Monetary Policy Committee (Released March 21)

Readings:

- 1. BBCKS, Chapter 9: Fiscal Policy
- 2. "As Japan's Abe Leaves, Abenomics Will Remain, for Good or Ill," *New York Times*, August 31, 2020.
- 3. "As U.S. Debt Surges, Europe Brings Its Own Under Control," *The Wall Street Journal*, October 22, 2023.

Watch: (optional) Fiscal Policy Basics

10. Case: Germany in the 1990s: Managing Reunification (Tuesday, February 13)

[First Case Write-Up due prior to class today!]

<u>Key Topics</u>: constraints on domestic policy, economic integration, fiscal and monetary interaction, international policy coordination

Readings:

- 1. Harvard Business School Case 793-033, "Germany in the 1990s: Managing Reunification."
- 2. "How Mr. Soros Made a Billion by Betting Against the Pound," *The Times*, October 26, 1992.
- 3. "Black Wednesday at the Bundesbank," Helmut Schlesinger, September 17, 2017 [excerpt from foreword in Six Days in September (2017) OMFIF Press]

Watch: No Video Today!

11. Exchange Rates in the Short Run (Monday, February 19)

<u>Key topics:</u> arbitrage; purchasing power parity; covered and uncovered interest-rate parity; foreign exchange market equilibrium; exchange-rate expectation; overshooting

Daily Briefing: India Ministry of Commerce & Industry Monthly Inflation (Released March 14)

Readings:

- 1. BBCKS Chapter 10: The Economics of Currency Markets
- 2. "Ben Bernanke: Currency Manipulator," The Wall Street Journal, October 30, 2012.
- 3. "Brexit Worries Reassert Hold Over British Pound," Wall Street Journal, September 9, 2020.
- 4. "Turkey's Unexpected Rate Rise Gives Lira a Lift," Wall Street Journal, September 24, 2020.

Watch: (optional) IRP (Yeah You Know Me)

12. Fixed Exchange Rates and Capital Controls (Tuesday, February 20)

<u>Key Topics</u>: floating exchange rates; fixed exchange rates; foreign-exchange intervention; capital flight; moral hazard; capital controls; monetary union

<u>Daily Briefing</u>: S&P CoreLogic Case Shiller Home Price Index (Released February 27)

Readings:

- 1. BBCKS Chapter 11: Fixed Exchange Rates and Their Implications.
- 2. "Fear of Floating," *The Economist*, July 10, 2003.
- 3. "The Trilemma of International Finance," The New York Times, July 9, 2010.
- 4. "Why Japan Stands Virtually Alone in Keeping Interest Rates Ultralow," *The Wall Street Journal*, October 21, 2022.
- 5. "Argentina Plans Emergency Economic Measures to Avoid Big Devaluation," *The Financial Times*, May 14, 2023.

Watch: (optional) Fixed Exchange Rate Mechanics

13. Firms and Exchange Rates I (Monday, February 26)

<u>Key Topics</u>: monopoly pricing; market segmentation and price discrimination; pricing to market; net present value; exposure to currency risk

<u>Daily Briefing</u>: Chinese retail sales (Released mid-March)

Reading:

- 1. BBCKS Chapter 12: Competing in International Markets
- 2. "Perils of Haven Status Haunt Rebounding Swiss Economy," *The Financial Times*, August 16, 2018.
- 3. "Companies Brace for Profit Hit from Euro Rally," *The Wall Street Journal*, September 7, 2020.
- 4. "Businesses Brace for Currency Chaos in Asia, a Region with a History of Crisis," *New York Times*, October 4, 2022.

Watch: (optional) Single-Price Monopoly Pricing Review

14. Firms and Exchange Rates II (Tuesday, February 27)

Key Topics: exposure to currency risk; net present value; hedging

Daily Briefing: Canadian Monetary Policy (released March 6)

Reading:

- 1. BBCKS Chapter 12: Competing in International Markets
- 2. Froot, Scharfstein, and Stein, "A Framework for Risk Management," *Harvard Business Review*, November-December, 1994, reprint 94604.
- 3. "Brazilian Real Rally Hits Bearish Positions on Coffee and Sugar," *The Financial Times*, October 15, 2018.
- 4. "Surging Euro Presents E.C.B. With a Dilemma," New York Times, September 10, 2020.

Watch: No Video Today!

15. Case: Jaguar plc, 1984 (Monday, March 4)

[Second Case Write-Up due prior to class today!]

Key Topics: international pricing; exposure to currency risk; foreign-currency hedging

Readings:

1. Harvard Business School Case 9-290-005, "Jaguar plc., 1984."

Watch: No Video Today!

16. Case: COVID-19: The Global Shutdown (Tuesday, March 5)

<u>Key Topics</u>: supply shock; demand shock; expectations; global linkages; trade policy; fiscal policy; monetary policy; firms and exchange rates

Readings:

- 1. Harvard Business School Case 9-320-108, "COVID-19: The Global Shutdown".
- 2. "Is the World Economy Entering a Wage-Price Spiral?" The Economist, 16 October 2021.

Watch: No Video Today!

FINAL due by 1:30pm Thursday, March 7 (Exam available on Canvas starting at 1:30pm on Tuesday, March 5)

** EXAM MAY NOT BE TAKEN DURING ANY OTHER CLASS TIME **



MANAGING ORGANIZATIONS Spring, 2024

Faculty

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Office Hours: Tuesdays 1:30-3:00 p.m. or by Appointment

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Kim Werner

Overview

Managing Organizations is the final installment of the core organizational behavior curriculum. Building on ideas developed in Tuck Launch and Managing People, and applying principles developed in Strategy and other courses, MO will focus on how organizations get things done.

Organizations are complex social systems that bring together tasks and structures, people and culture. The role of leadership is to manage this system, keeping it well-aligned, in service of achieving strategic goals and doing so in a way that harnesses the benefits of diversity, equity and inclusion (DEI). We address these topics by engaging in case studies and role plays and by discussing contemporary organizational challenges.

Course Objectives

- Understand the core elements of organization design and management
- Establish that high performance results from organizational alignment behind the firm's strategy
- Appreciate the role of leadership in maintaining alignment among elements of the organization, even as the landscape around the firm evolves

Updated 03/10/24 Page 1 of 7

Materials

All cases and readings are available in Canvas. A typical class will include one case as well as one or two <u>required</u> readings. Supplementary readings are often suggested for your perusal after class.

Readings and materials will be provided in the session details. All case materials must be downloaded individually. You should save a PDF version of each case by 11:59 p.m., Tuesday, June 4; after that you will no longer have access to these cases. Download early so you have your own electronic archive to reference during and following your time at Tuck.

Honor Code

As a reminder to all of us, here is a statement of Tuck's Academic Honor Principle:

Integrity and honesty in the performance of academic activities, both in the classroom and outside, are essential to the educational experience for which the Tuck School has always stood. Each member of the Tuck community accepts the personal responsibility to uphold and defend high ethical standards in all academic endeavors, and to promote an atmosphere in which honest and imaginative academic work may flourish.

AI Policy: ChatGPT and other generative artificial intelligence (AI) tools offer new opportunities for both students and instructors. Students may make use of technology, including generative AI, to contribute to their understanding of course materials or to help brainstorm ideas, create content outlines, or assist with research for assignments. If you consult generative AI as part of an assignment, we ask that you include in your assignment a list of the exact prompts that you used. Although you may use generative AI to stimulate your thinking, you may not directly use its raw output as a representation of your own work. If you have any questions about the use of AI applications for course work, please speak with the instructor.

Requirements

This is a discussion-intensive class that depends upon your active engagement and participation for your learning and for that of your peers. A substantial part of your grade will therefore be based on your class participation. Class participation will include the following pieces:

- Class attendance Your participation is integral to class discussions, so class attendance is expected. Unlike in the Winter term, there are no excused absences from Spring core classes. Since grades are dependent on class participation, absences, as well as arriving late or departing early, will adversely affect your grade. If you must miss class, please let your professor and your class scribe know in advance via email.
- Quality contributions in class Your contributions should be clear, concise, and offer ideas that will advance our conversations. Class contribution requires that you are prepared for class, having read and thought about the material and the case in advance. There is also an expectation that you are prepared to challenge the material, apply the material to your own

Updated 03/10/24 Page 2 of 7

experiences, and to add to the discussion each class. Please bear in mind that it is the quality of your contributions, not their quantity, that will determine your class participation grade.

Midterm Case Analysis – The assignment will ask you, working together with your Study Group/FYP team, to read a case, analyze it in terms of the frameworks developed in the course, and submit your written analysis. The midterm assignment is due on Friday, April 5 at 4:30 p.m.

<u>Note</u>: For objectivity in grading, please do <u>not</u> include your names anywhere in your file. Include only your study group number.

- Final Exam You will read a case and answer a series of brief essay questions about it. This untimed, take-home exam will be administered through Canvas and made available at 12:00 p.m. on the last day of class. Your answers must be uploaded to Canvas by 9:00 a.m. on Monday, April 29 and you may take the exam at any time of your choosing during that period. Consistent with the Tuck Honor Code, you may not consult with anyone, search the internet, the library, or any other source to gather additional information. There is no time limit, but most students spend approximately four hours on the exam.
- Leadership Development Plan The point of the Leadership Development Plan is to identify priorities that you will hold yourself accountable to work on. You might want to begin by revisiting the Leadership Values Statement you developed as part of the River of Life exercise during Tuck Launch. After that, you should write a plan of no more than two double-spaced pages that addresses the following questions:
 - 1. What is one thing you intend to work on to develop as a leader?
 - 2. What have you accomplished so far in furthering your personal leadership development? What are you going to work on in the Spring term? Some examples may be in FYP, a class, a club, or socially. What do you plan to do over the summer?
 - 3. How will you measure progress and hold yourself accountable?

Your Leadership Development Plan is due via Canvas at 4:00 p.m. on Friday, May 3.

Grading

Being a good manager requires superior skills in both verbal and written communication; correspondingly, your grade for this course will be based on both class participation and on three written assignments (two written individually, one in a team).

Class Participation:			
Written Assignments:			
Midterm Case Analysis (in Study Groups/FYP teams)	25%		
Leadership Development Plan	10%		

Updated 03/10/24 Page 3 of 7

Final Exam 35%

Updated 03/10/24 Page 4 of 7

Schedule

1. Organizational Alignment

case: "How Pixar Lost Its Way" by Orr (The Atlantic)

reading: "Design Your Organization to Match Your Strategy" by Carucci &

Shappell (*HBR*)

questions: Did owning Pixar make Disney better off?

Did ownership by Disney make Pixar better off?

In what ways did the merger cause Pixar to "lose its way"?

What factors have enabled Pixar to get back on track in the time since this

article was written? Or are they still struggling to find the magic?

supplement: "Reanimating Pixar: How Pete Docter Steered the Studio Out of Scandal"

by Keegan (Hollywood Reporter)

2. People

case: 2G Robotics: Designing a Compensation Plan that Pays Off

reading: "Designing Jobs Right" by Martin (HBR 2023)

questions: Describe and assess the direct compensation system at 2G Robotics

What problems does the informality of the current system create? What are some of the non-financial rewards that are available to

employees?

How should Gillham approach the meeting with Lin? How might he want

to tailor his communication style?

3. Organizational Culture

case: (New case on Microsoft by Breakout Learning)

reading: *Hit Refresh* by Satya Nadella (p. 111-113)

questions:

Updated 03/10/24 Page 5 of 7

4. Formal Organizational Structure

case: Wildfire Entertainment

readings: "Structure That's Not Stifling" by Ranjay Gulati (*HBR*)

"Note on Compensation and Incentive Systems" (HBS)

questions: Describe the context Wildfire faced in the early days of its development?

Why might a single organizational structure not be effective?

What are the pros and cons of the three main organizational archetypes

that Wildfire used: function, matrix, and divisional structures?

In a context of rapid growth, how can a tech-based start-up know when the

organizational structure should be changed?

supplement: "What is the Right Organization Structure for the 21st Century?" by Abby

Levene

5. Informal Structure and Social Networks

case: Building a Networked Organization: Restructuring the IT Department at

MWH(A)

assessment: Network Assessment

Please complete the Network Assessment by 4:30 p.m., Thursday, April 4.

reading: "Cross-Silo Leadership" by Casciaro, Edmondson & Jang (*HBR*)

questions: What situation does Vic Gulas find himself in?

What is the situation at MWH more generally? Use the Congruence Model

to anchor your analysis.

What does the data analysis reveal to Gulas about iNet?

How diverse is Vic's own personal network? Does this matter?

Updated 03/10/24 Page 6 of 7

6. Organizational Innovation

case: Moleskine (A)

questions: What gives Moleskine its competitive advantage?

How has the company's approach to innovation evolved since its

founding?

What is your assessment of the changes made by CEO Arrigo Berni so

far? What did he do well? What could he have done differently?

What are the most urgent challenges facing CEO Berni and co-founder Sebregondi at the end of the case? How should they address them? Please

come to class ready to defend your position.

supplement: "Dynamic Ambidexterity: How Innovators Manage Exploration and

Exploitation" by Chen (Business Horizons)

7. Leading Change

case: Ingrid Johnson and Nedbank Business Banking

questions: After you've read and prepared the case individually, please meet with

your study group for a Breakout Learning "Brief Case" experience

8. Capstone Class

case: A Framework for Change: Diversity, Equity, and Inclusion at the Federal

Reserve Bank of San Francisco

reading: "Why Diversity Matters in The World of Finance" by Steenbarger (*Forbes*)

questions: Imagine that you're in Sara's position and have just been hired to

implement the Framework for Change:

What specific initiatives would you implement across the Bank? What specific actions items or business activities will you need to consider in

implementation?

How would you prioritize your initiatives?

How would you go about gaining buy-in across the organization?

Oftentimes, current employees may feel that they are losing opportunities or there is an unfair advantage during the process of implementing DEI initiatives. How might you, as a leader, address the impact of these

initiatives on these employees?

Updated 03/10/24 Page 7 of 7

Tuck School of Business Administration Dartmouth College Hanover, New Hampshire 03755

OPERATIONS MANAGEMENT Spring 2024

COURSE INFORMATION

Professor Laurens Debo Office: 121 Tuck, Laurens.G.Debo@tuck.dartmouth.edu

Office Hours: Tuesdays 1-2pm

Overview

Operations Management is the systematic direction and control of the processes that transform inputs into finished goods or services. Operations is one of the primary functions of a firm. While marketing induces the demand for products and finance provides the capital, operations *produces and delivers* the products and services.

This course provides an introduction to the concepts and analytic methods that are useful in understanding the management of a firm's operations. Our aim is to (1) familiarize you with the problems and issues confronting operations managers, and (2) provide you with language, concepts, insights and tools to deal with these issues in order to gain competitive advantage through operations. Because the course deals with the management of "processes," it applies to both service and manufacturing companies, to both for-profit and non-profit organizations, and to virtually any functional area or industry.

Time and Place

Refer to the first year Spring Term schedule for time, date and location of classes.

Materials

All cases and readings are available on the course website (Canvas). Certain readings will appear on Canvas after class as specified in the detailed session description in this syllabus.

There is no required textbook. Some recommended optional texts are on reserve in Feldberg Library:

Cachon, G., & Terwiesch, C. *Matching Supply with Demand: An Introduction to Operations Management, 3rd Edition.* New York: McGraw-Hill Irwin.

Hopp, W. J., & Spearman, M. L. Factory Physics: Foundations of Manufacturing Management, 3rd Edition. Burridge, IL: Irwin Professional Publishing.

Preparation, Participation, and Attendance

Everyone is expected to attend and to prepare fully for each day. Failure to attend class, as well as arriving late or departing early, will affect your grade. If you must *plan* on missing a class, let your instructor know *in advance* in writing.

If you are unprepared for class, let the instructor know before class begins.

I will follow the general Tuck policy regarding the in-class use of laptop computers, cell phones, and all other electronic communication devices: "students shall not use laptop computers, cellular telephones, or any other electronic communication device in any class session unless explicit permission to do so is granted." Notice will be given for those sessions in which laptop usage is required.

Grading

Your grade will be decided as a weighted average with the following weights:

15% Class Contribution

20% Written Assignments

7.5% Littlefield Simulation

22.5% Midterm Examination

35% Final Examination

I will judge class contribution on the extent to which you appear prepared, the relevance and depth of your comments, and the degree to which you listen carefully and respond to your peers.

Exams are open-book and open-note (by which I mean you may use any materials from the current offering of Operations Management), and may require the use of spreadsheets and associated tools. As preparation for the exam, two review sessions will be held, one before the midterm and one before the final exam, during which I will go over practice questions that will be uploaded on Canvas during the term. Two self-grading multiple-choice quizzes will be made available on Canvas, one for each exam. These quizzes will allow you to test your understanding of the concepts covered during the term. After three failed attempts, the correct answer with key will be given. These quizzes are optional. Your participation and performance for these quizzes are not counted towards your grade.

Assignments

Assignments involving case studies, readings, and problems are described in the next section—Daily Plan and Preparation Guidelines.

For written assignments, state your assumptions clearly. If you need to make an assumption regarding something central to the problem at hand, justify it. For numerical problems, show your work. Your "answer" alone is not sufficient; your supporting argument should be concise and convincing.

All assignments, except the Littlefield Technologies Simulation, should be completed individually but can be discussed in groups of no more than two. Littlefield should be done in your FYP team. Written assignments should be uploaded in a pdf format to Canvas before the beginning of class on assigned due dates. Late homework will not be accepted.

Solutions to the Concept Checks, as well as a video explanation will be posted on Canvas during the term.

Honor Principle

Only those who contribute approximately equally to the preparation of a group homework assignment may take full credit for it. This does not mean that everyone's ideas must be included. It means that everyone should contribute about equally to the overall process.

In preparing for class, exams, and all homeworks you may not use notes or any other materials from any previous offering of this, or a similar, course or discuss the material with students who have already taken the course. This restriction extends to case-related information obtained from other sources.

Posting of course materials to shared repositories outside of our internal Canvas system will be considered a violation of the Tuck Honor Principle.

If you wish to use them during the exams, keep a copy of all assignments. Sharing of such material during the exams is not permitted.

<u>Generative AI Policy:</u> The use of Generative AI systems is expressly forbidden on the midterm and final exams. So as to maximize your learning and practice, I encourage you to not use such systems on assignments but I do not forbid it.

COURSE CALENDAR

Class	Subject	Date	Before Class	Hand-Ins
1	Introduction and Operations Strategy	Tues 3/26	Prepare Menu Innovation and the Evolution of McDonald's Operating Model	
2	Process Flow Analysis	Wed 3/27	Prepare Kristen's Cookie Company (A)	Submit Q1- Q3 from the Kristen's Cookie assignment
3	Understanding Different Production Processes	Mon 4/1	Prepare SpaceX case	
4	Factory Physics	Tues 4/2		Submit Concept Check #1
5	Quality Management	Mon 4/8	Prepare Steinway & Sons	Quiz 1 Due
6	Service Science	Tues 4/9		Submit Concept Check #2
7	Back-Office Operations	Mon 4/15	Prepare Hindustan National Bank	
8	Sales and Operations Planning Simulation	Tues 4/16	Prepare B's Wax	Submit Concept Check #3

OPTIONAL MIDTERM EXAM Q&A SESSION (Ankeny)

Wednesday, April 17, 5:15pm – 6:45pm

MIDTERM EXAM

This is a two hour exam. Access will open at 6pm on Thursday, April 18 and close at 11am on Friday, April 19.

Class	Subject	Date	Before Class	Hand-Ins
9	Planning and Control	Mon 4/22		
10	Toyota Production System	Tue 4/23	Prepare Toyota Motor Manufacturing – USA	
11	Inventory Management	Mon 4/29		Submit Concept Check #4 Quiz 2 due
12	Supply Chains for Short Life Cycle Products	Tue 4/30	Prepare Sport Obermeyer	
	Littlefield Simulation Starts 5:00 PM	Tues 4/30		
13	Project Management	Mon 5/6	Read "Project Management"	Submit Concept Check #5
	Littlefield Simulation Ends 5:00 PM	Mon 5/6		
14	Littlefield Debrief	Tues 5/7		Littlefield Write-Up Due
15	Guest Speaker: Micah Goldstein T'02	Mon 5/13	Read background material and preparation questions	
16	Building a Service Strategy	Tues 5/14	Prepare Enhancing Service at Southwest	Submit Concept Check #6

OPTIONAL FINAL EXAM Q&A SESSION (Ankeny)

Wednesday, May 15, 5:15pm - 6:45pm

FINAL EXAM

This is a three hour exam. Access will open at 6am on Friday, May 17 and close at noon on Friday, May 17.

DAILY PLAN AND PREPARATION GUIDELINES

CLASS 1. 26 MARCH INTRODUCTION AND OPERATIONS STRATEGY

Preparation

Prepare the case Menu Innovation and the Evolution of McDonald's Operating Model for discussion.

- 1. What are the major operational differences between the <u>traditional</u> McDonald's way and Burger King way?
- 2. How did these differences relate to each company's competitive positioning in the fast food marketplace?
- 3. As discussed in the case, McDonalds moved away from its traditional approach; first with the "Made For You" operating concept and then with its "Create Your Taste" experiment. What is the key difference as compared to the traditional approach? What customer-experience aspect is McDonalds trying to improve? What aspect will be hurt with this change?
- 4. Would you recommend McDonald's resume the all day breakfast offering?

After Class

Read the notes titled A Framework for Operations Strategy and Process Mapping. Both notes will be uploaded to the course website after class.

CLASS 2. 27 MARCH PROCESS FLOW ANALYSIS

Preparation

Prepare the *Kristen's Cookie Company (A)* case for discussion. (Note that the questions below differ slightly from those on p. 3 of the case. You do not need to prepare the "Problems for Further Thought" on p. 3 of the case.)

- 1. Draw a process flow diagram for Kristen's Cookies. Do this at an "intermediate level of detail" as in Figure 4 of the *Process Mapping* note.
- 2. How long does it take (i.e., how much time) to fill an order for one dozen cookies following the standard process as defined in the case?
- 3. How many orders can you fill in a night, assuming you are open four hours each night?
- 4. How much of your own and your roommate's valuable time will it take to fill each order?
- 5. Because your baking trays can hold exactly one dozen cookies, you will produce and sell cookies by the dozen. Should you give any discount for people who order two-dozen cookies, three-dozen cookies, or more?
- 6. Are there any changes you can make in your production plans that will allow you to make better cookies or more cookies in less time or at lower cost?

Due Before Class

Upload your answers (in a pdf format) to Preparation Questions 1 through 3 in the Syllabus.

After Class

Read Kristen's Cookie Company (A2). This reading will be uploaded to the course website after class. I will also upload a set of process analysis practice problems after class.

CLASS 3. 1 APRIL UNDERSTANDING DIFFERENT PRODUCTION PROCESSES

Preparation

Please read the *SpaceX* case. Although there are no pre-assigned questions, I will be posing questions for thought and discussion during class, and so it will be important to have read the case in advance.

CLASS 4. 2 APRIL FACTORY PHYSICS

Preparation

There is no preparation for this class. I will discuss a number of fundamental concepts governing manufacturing operations.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #1.

After Class

Read the note titled *Factory Physics (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 5. 8 APRIL QUALITY MANAGEMENT

Preparation

Watch the video about the standard normal distribution (part I). Submit your answer for Quiz 1 on Canvas. Prepare *Steinway & Sons* for case discussion.

- 1. Consider the data in Exhibit 7 (available as an Excel file on the course website). Is the second approach (Sample 2) an improvement over the first approach (Sample 1)? Is the machine capable of producing high quality parts?
- 2. What accounts for Steinway's reputation as a manufacturer of high-quality pianos?
- 3. Yamaha, based in Japan, is one of Steinway's major global competitors. Contrast Yamaha's and Steinway's operations. What are the implications for quality?
- 4. Is the adoption of automated technology, like the new CNC shaping equipment, consistent with Steinway's quality strategy?

After Class

Optional: Read Hall, J. M. and Johnson, M. E. (2009). When Should a Process Be Art, Not Science? *Harvard Business Review* (March). This reading will be uploaded to the course website after class.

CLASS 6. 9 APRIL SERVICE SCIENCE

Preparation

In this class I will discuss tools, techniques and insights that apply to services. There is no preparation required.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #2.

After Class

Optional: watch the video about queuing.

Read the note titled *Queueing (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 7. 15 APRIL BACK-OFFICE OPERATIONS

Preparation

Prepare Hindustan National Bank for case discussion.

- 1. In Appendix B, Pavan Verma writes: "Based just on processing time, we ought to be able to turn around a Standard in less than two business days, and a New in less than three days. However, as the previous analysis showed, this just isn't the case." What explains the difference?
- 2. Please calculate the utilization for each step of the process (by team) using the available data for the first quarter. You may find the definition "utilization = (time busy) / (time available)" to be useful in this setting.
- 3. Based on your analysis for question (2), what do you propose that Anjali Kashyap do to improve the performance of the Karimnagar district branch?

After Class

Optional: watch the video about pooling.

Read the after-class note (with practice problems) that will be uploaded to the course website after class.

CLASS 8. 16 APRIL SALES AND OPERATIONS PLANNING SIMULATION

Preparation

Prepare *B's Wax Candle Co.* Preparation instructions are in the case. You will play this virtual simulation game in your FYP teams. Further instructions will be made available on Canvas as the date approaches.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #3.

MIDTERM EXAMINATION:

This is a two hour exam. Access will open at 6pm on Thursday, April 17 and close at 11am on Friday, April 18.

The exam must be taken in one continuous 2-hour sitting during that access window. You must complete the exam before 11am.

CLASS 9. 22 APRIL PLANNING AND CONTROL

There is nothing to prepare for this session.

After Class

Optional: watch the video about MRP.

Read the note titled *An Introduction to MRP (with Practice Problems)*. This note will be uploaded to the course website after class. This note provides additional detail on MRP beyond what is covered in class. For the purposes of this course you are only responsible for the detail covered during the class session.

CLASS 10. 23 APRIL TOYOTA PRODUCTION SYSTEM

Preparation

Prepare Toyota Motor Manufacturing for case discussion.

- 1. What is the cause of the seat problem?
- 2. What is the cost of stopping the line?

After Class

There are two optional after-class readings that will be uploaded to the course website after class:

Gryta, T., T. Mann and C. Lombardo (2021). Larry Culp Rewired GE. Then He Unwound It Wall Street Journal (November 13).

Shih, W. (2019) Conducting a Kaizen. Harvard Business School Note.

CLASS 11. 29 APRIL INVENTORY MANAGEMENT

Preparation

Watch the video about the standard normal distribution (part II). Submit your answer for Quiz 2 on Canvas.

Watch the video about the incremental contribution.

You must register your Littlefield simulation team before this class session. The link for team registration can be found in the Littlefield Technologies note made available previously.

Assignment: Each FYP team must register for the Littlefield simulation team before this class session. Please note that team name must consist only of lower-case letters (no punctuation). One person on the team registers for the team and shares the team name and password with the rest of the team. The link for team registration is here. The access code is "tuck" (without the quotes). Please include your correct section number when you register your team. Please also enter your chosen team name and password in the text box provided.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #4.

After Class

Optional: Watch the video about the EOQ model and newsvendor.

Read the note titled *Inventory Management (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 12. 30 APRIL SUPPLY CHAINS FOR SHORT LIFE CYCLE PRODUCTS

Preparation

Prepare Sport Obermeyer for case discussion.

Questions:

- 1. Using the forecast data given in the case Exhibit 6 (available as an Excel file on the course website), make a recommendation for how many units of each style Obermeyer should order during the initial phase of production. For this question, assume there is only a single opportunity to submit your production order (thinking about how your answer will change if there is a second opportunity to order is the subject of Question 2 below).
 - a. First, assume that there are no constraints on the total production commitment or on any individual style. How many units should Obermeyer order during the initial production phase?
 - b. Now assume that Obermeyer's initial production commitment cannot exceed 22,500 units. How many units should Obermeyer order during the initial production phase?
- 2. Conceptually, how should Obermeyer plan the initial phase of production if a second production run is feasible later?

3. What operational changes would you recommend to Obermeyer to improve performance?

30 APRIL 5:00 PM Littlefield Simulation Begins

CLASS 13. 6 MAY PROJECT MANAGEMENT

Preparation

Read the note titled Project Management Background.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #5.

After Class

Read the note titled *Project Management (with Practice Problems)*. This note will be uploaded to the course website after class.

6 MAY 5:00PM LITTLEFIELD SIMULATION ENDS

CLASS 14. 7 MAY LITTLEFIELD SIMULATION DEBRIEF

In this class I will discuss key learnings from the Littlefield simulation.

Turn in Before Class

Submit a pdf of your team's Littlefield write-up (one per team). As described in the Littlefield Technologies Note: Your team should submit a summary of what actions you took during the time that you had access to the factory, an explanation of why you took those actions, and a retrospective view on whether you think you did the right thing. Show analysis to justify your conclusions. Your team's grade will be partially based on your performance, but mainly based on your summary. The summary should consist of two pages of text, with up to two more pages of supporting analyses in an attached appendix. Important: Your report should include your team name, the names of each team member, your final cash balance, and a screenshot of your "History" as an attachment (History does not count towards page limit).

GUEST SPEAKER

Our guest speaker today will be Micah Goldstein T'02. Preparation for this class session will require some background reading and that will be distributed several days prior to class

CLASS 16. 14 MAY BUILDING A SERVICE STRATEGY

Preparation

Prepare Enhancing Service at Southwest for case discussion. Time allowing, I will also briefly discuss the December 2022 Southwest network failure.

Questions:

- 1. How do Southwest's operations support its strategy?
- 2. Discuss how competitors with a hub-and-spoke system could benefit/not benefit from copying Southwest's approach. Which is cheaper to run, a hub-and-spoke system or a point-to-point system?
- 3. What are the benefits of quick airplane turnaround? What is the financial impact?
- 4. Consider the questions facing Kelly (premium beverages, international partners, serving Hawaii). Are these service enhancements consistent with Southwest operations strategy?

Due Before Class

Upload your answers (in a pdf format) to Concept Check #6.

FINAL EXAMINATION:

This is a three hour exam. Access will open at 6am on Friday, May 17 and close at noon on Friday, May 17.

The exam must be taken in one continuous 3-hour sitting during that access window. You must complete the exam before noon.

Tuck School of Business Administration Dartmouth College Hanover, New Hampshire 03755

OPERATIONS MANAGEMENT Spring 2024

COURSE INFORMATION

Professor Joe Hall Professor Brian Tomlin
Office: 108C Tuck, 646-0778 Office: 108G Tuck, 646-2136

Overview

Operations Management is the systematic direction and control of the processes that transform inputs into finished goods or services. Operations is one of the primary functions of a firm. While marketing induces the demand for products and finance provides the capital, operations *produces and delivers* the products and services.

This course provides an introduction to the concepts and analytic methods that are useful in understanding the management of a firm's operations. Our aim is to (1) familiarize you with the problems and issues confronting operations managers, and (2) provide you with language, concepts, insights and tools to deal with these issues in order to gain competitive advantage through operations. Because the course deals with the management of "processes," it applies to both service and manufacturing companies, to both for-profit and non-profit organizations, and to virtually any functional area or industry.

Time and Place

Refer to the first year Spring Term schedule for time, date and location of classes.

Materials

All cases and readings are available on the course website (Canvas). Certain readings will appear on Canvas after class as specified in the detailed session description in this syllabus.

There is no required textbook. Some recommended optional texts are on reserve in Feldberg Library:

Cachon, G., & Terwiesch, C. *Matching Supply with Demand: An Introduction to Operations Management, 3rd Edition.* New York: McGraw-Hill Irwin.

Hopp, W. J., & Spearman, M. L. Factory Physics: Foundations of Manufacturing Management, 3rd Edition. Burridge, IL: Irwin Professional Publishing.

Preparation, Participation, and Attendance

Everyone is expected to attend and to prepare fully for each day. Failure to attend class, as well as arriving late or departing early, will affect your grade. If you must *plan* on missing a class, let your instructor know *in advance* in writing.

If you are unprepared for class, let the instructor know before class begins.

We will follow the general Tuck policy regarding the in-class use of laptop computers, cell phones, and all other electronic communication devices: "students shall not use laptop computers, cellular telephones, or any other electronic communication device in any class session unless explicit permission to do so is granted." Notice will be given for those sessions in which laptop usage is required.

Grading

Your grade will be decided as a weighted average with the following weights:

15% Class Contribution

20% Written Assignments

7.5% Littlefield Simulation

22.5% Midterm Examination

35% Final Examination

We will judge class contribution on the extent to which you appear prepared, the relevance and depth of your comments, and the degree to which you listen carefully and respond to your peers.

Exams are open-book and open-note (by which we mean you may use any materials from the current offering of Operations Management), and may require the use of spreadsheets and associated tools.

Assignments

Assignments involving case studies, readings, and problems are described in the next section—Daily Plan and Preparation Guidelines.

For written assignments, state your assumptions clearly. If you need to make an assumption regarding something central to the problem at hand, justify it. For numerical problems, show your work. Your "answer" alone is not sufficient; your supporting argument should be concise and convincing.

All assignments, except the Littlefield Technologies Simulation, should be completed individually but can be discussed in groups of no more than two. Littlefield should be done in your FYP team. Written assignments should be uploaded in a pdf format to Canvas before the beginning of class on assigned due dates. Late homework will not be accepted.

Honor Principle

Only those who contribute approximately equally to the preparation of a group homework assignment may take full credit for it. This does not mean that everyone's ideas must be included. It means that everyone should contribute about equally to the overall process.

In preparing for class, exams, and all homeworks you may not use notes or any other materials from any previous offering of this, or a similar, course or discuss the material with students who have already taken the course. This restriction extends to case-related information obtained from other sources.

Posting of course materials to shared repositories outside of our internal Canvas system will be considered a violation of the Tuck Honor Principle.

If you wish to use them during the exams, keep a copy of all assignments. Sharing of such material during the exams is not permitted.

<u>Generative AI Policy:</u> The use of Generative AI systems is expressly forbidden on the midterm and final exams. So as to maximize your learning and practice, we encourage you to not use such systems on assignments but we do not forbid it.

COURSE CALENDAR

Class	Subject	Date	Before Class	Hand-Ins
1	Introduction and Operations Strategy	Tues 3/26	Prepare Menu Innovation and the Evolution of McDonald's Operating Model	
2	Process Flow Analysis	Wed 3/27	Prepare Kristen's Cookie Company (A)	Submit Q1- Q3 from the Kristen's Cookie assignment
3	Understanding Different Production Processes	Mon 4/1	Prepare SpaceX case	
4	Factory Physics	Tues 4/2		Submit Concept Check #1
5	Quality Management	Mon 4/8	Prepare Steinway & Sons	
6	Service Science	Tues 4/9		Submit Concept Check #2
7	Back-Office Operations	Mon 4/15	Prepare Hindustan National Bank	
8	Sales and Operations Planning Simulation	Tues 4/16	Prepare B's Wax	Submit Concept Check #3

OPTIONAL MIDTERM EXAM Q&A SESSION (Zoom)

Wednesday, April 17, 5:15pm – 6:45pm

MIDTERM EXAM

This is a two hour exam. Access will open at 6pm on Thursday, April 18 and close at 11am on Friday, April 19.

Class	Subject	Date	Before Class	Hand-Ins
9	Planning and Control	Mon 4/22		
10	Toyota Production System	Tue 4/23	Prepare Toyota Motor Manufacturing – USA	
11	Inventory Management	Mon 4/29		Submit Concept Check #4
12	Supply Chains for Short Life Cycle Products	Tue 4/30	Prepare Sport Obermeyer	
	Littlefield Simulation Starts 5:00 PM	Tues 4/30		
13	Project Management	Mon 5/6	Read "Project Management"	Submit Concept Check #5
	Littlefield Simulation Ends 5:00 PM	Mon 5/6		
14	Littlefield Debrief	Tues 5/7		Littlefield Write-Up Due
15	Guest Speaker: Micah Goldstein T'02	Mon 5/13	Read background material and preparation questions	
16	Building a Service Strategy	Tues 5/14	Prepare Enhancing Service at Southwest	Submit Concept Check #6

OPTIONAL FINAL EXAM Q&A SESSION (Zoom)

Wednesday, May 15, 5:15pm – 6:45pm

FINAL EXAM

This is a three hour exam. Access will open at 6am on Friday, May 17 and close at noon on Friday, May 17.

DAILY PLAN AND PREPARATION GUIDELINES

CLASS 1. 26 MARCH INTRODUCTION AND OPERATIONS STRATEGY

Preparation

Prepare the case Menu Innovation and the Evolution of McDonald's Operating Model for discussion.

- 1. What are the major operational differences between the <u>traditional</u> McDonald's way and Burger King way?
- 2. How did these differences relate to each company's competitive positioning in the fast food marketplace?
- 3. As discussed in the case, McDonalds moved away from its traditional approach; first with the "Made For You" operating concept and then with its "Create Your Taste" experiment. What is the key difference as compared to the traditional approach? What customer-experience aspect is McDonalds trying to improve? What aspect will be hurt with this change?
- 4. Would you recommend McDonald's resume the all day breakfast offering?

After Class

Read the notes titled A Framework for Operations Strategy and Process Mapping. Both notes will be uploaded to the course website after class.

CLASS 2. 27 MARCH PROCESS FLOW ANALYSIS

Preparation

Prepare the *Kristen's Cookie Company (A)* case for discussion. (Note that the questions below differ slightly from those on p. 3 of the case. You do not need to prepare the "Problems for Further Thought" on p. 3 of the case.)

- 1. Draw a process flow diagram for Kristen's Cookies. Do this at an "intermediate level of detail" as in Figure 4 of the *Process Mapping* note.
- 2. How long does it take (i.e., how much time) to fill an order for one dozen cookies following the standard process as defined in the case?
- 3. How many orders can you fill in a night, assuming you are open four hours each night?
- 4. How much of your own and your roommate's valuable time will it take to fill each order?
- 5. Because your baking trays can hold exactly one dozen cookies, you will produce and sell cookies by the dozen. Should you give any discount for people who order two-dozen cookies, three-dozen cookies, or more?
- 6. Are there any changes you can make in your production plans that will allow you to make better cookies or more cookies in less time or at lower cost?

Due Before Class

Upload your answers (in a pdf format) to Preparation Questions 1 through 3 in the Syllabus.

After Class

Read Kristen's Cookie Company (A2). This reading will be uploaded to the course website after class. We will also upload a set of process analysis practice problems after class.

CLASS 3. 1 APRIL UNDERSTANDING DIFFERENT PRODUCTION PROCESSES

Preparation

Please read the *SpaceX* case. Although there are no pre-assigned questions, we will be posing questions for thought and discussion during class, and so it will be important to have read the case in advance.

CLASS 4. 2 APRIL FACTORY PHYSICS

Preparation

There is no preparation for this class. We will discuss a number of fundamental concepts governing manufacturing operations.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #1.

After Class

Read the note titled *Factory Physics (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 5. 8 APRIL QUALITY MANAGEMENT

Preparation

Prepare Steinway & Sons for case discussion.

- 1. Consider the data in Exhibit 7 (available as an Excel file on the course website). Is the second approach (Sample 2) an improvement over the first approach (Sample 1)? Is the machine capable of producing high quality parts?
- 2. What accounts for Steinway's reputation as a manufacturer of high-quality pianos?
- 3. Yamaha, based in Japan, is one of Steinway's major global competitors. Contrast Yamaha's and Steinway's operations. What are the implications for quality?
- 4. Is the adoption of automated technology, like the new CNC shaping equipment, consistent with Steinway's quality strategy?

After Class

Optional: Read Hall, J. M. and Johnson, M. E. (2009). When Should a Process Be Art, Not Science? *Harvard Business Review* (March). This reading will be uploaded to the course website after class.

CLASS 6. 9 APRIL SERVICE SCIENCE

Preparation

In this class we will discuss tools, techniques and insights that apply to services. There is no preparation required.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #2.

After Class

Read the note titled *Queueing (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 7. 15 APRIL BACK-OFFICE OPERATIONS

Preparation

Prepare Hindustan National Bank for case discussion.

- 1. In Appendix B, Pavan Verma writes: "Based just on processing time, we ought to be able to turn around a Standard in less than two business days, and a New in less than three days. However, as the previous analysis showed, this just isn't the case." What explains the difference?
- 2. Please calculate the utilization for each step of the process (by team) using the available data for the first quarter. You may find the definition "utilization = (time busy) / (time available)" to be useful in this setting.
- 3. Based on your analysis for question (2), what do you propose that Anjali Kashyap do to improve the performance of the Karimnagar district branch?

After Class

Read the after-class note (with practice problems) that will be uploaded to the course website after class.

CLASS 8. 16 APRIL SALES AND OPERATIONS PLANNING SIMULATION

Preparation

Prepare *B's Wax Candle Co*. Preparation instructions are in the case. You will play this virtual simulation game in your FYP teams. Further instructions will be made available on Canvas as the date approaches.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #3.

MIDTERM EXAMINATION:

This is a two hour exam. Access will open at 6pm on Thursday, April 18 and close at 11am on Friday, April 19.

The exam must be taken in one continuous 2-hour sitting during that access window. You must complete the exam before 11am.

CLASS 9. 22 APRIL PLANNING AND CONTROL

There is nothing to prepare for this session.

After Class

Read the note titled *An Introduction to MRP (with Practice Problems)*. This note will be uploaded to the course website after class. This note provides additional detail on MRP beyond what is covered in class. For the purposes of this course you are only responsible for the detail covered during the class session.

CLASS 10. 23 APRIL TOYOTA PRODUCTION SYSTEM

Preparation

Prepare Toyota Motor Manufacturing for case discussion.

- 1. As Doug Friesen, what would you do to address the seat problem? Where would you focus your attention and solution efforts?
- 2. What is the cause of the seat problem?
- 3. Where, if at all, does the current routine for handling defective seats deviate from the principles of the Toyota Production System?
- 4. What is the real problem facing Doug Friesen?

After Class

There are two optional after-class readings that will be uploaded to the course website after class:

Gryta, T., T. Mann and C. Lombardo (2021). Larry Culp Rewired GE. Then He Unwound It Wall Street Journal (November 13).

Shih, W. (2019) Conducting a Kaizen. Harvard Business School Note.

CLASS 11. 29 APRIL INVENTORY MANAGEMENT

You must register your Littlefield simulation team before this class session. The link for team registration can be found in the Littlefield Technologies note made available previously.

Assignment: Each FYP team must register for the Littlefield simulation team before this class session. Please note that team name must consist only of lower-case letters (no punctuation). One person on the team registers for the team and shares the team name and password with the rest of the team. The link for team registration is here. The access code is "tuck" (without the quotes). Please include your correct section number when you register your team. Please also enter your chosen team name and password in the text box provided.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #4.

After Class

Read the note titled *Inventory Management (with Practice Problems)*. This note will be uploaded to the course website after class.

CLASS 12. 30 APRIL SUPPLY CHAINS FOR SHORT LIFE CYCLE PRODUCTS

Preparation

Prepare Sport Obermeyer for case discussion.

Questions:

- 1. Using the forecast data given in the case Exhibit 6 (available as an Excel file on the course website), make a recommendation for how many units of each style Obermeyer should order during the initial phase of production. For this question, assume there is only a single opportunity to submit your production order (thinking about how your answer will change if there is a second opportunity to order is the subject of Question 2 below).
 - a. First, assume that there are no constraints on the total production commitment or on any individual style. How many units should Obermeyer order during the initial production phase?
 - b. Now assume that Obermeyer's initial production commitment cannot exceed 22,500 units. How many units should Obermeyer order during the initial production phase?
- 2. Conceptually, how should Obermeyer plan the initial phase of production if a second production run is feasible later?
- 3. What operational changes would you recommend to Obermeyer to improve performance?

30 APRIL 5:00 PM LITTLEFIELD SIMULATION BEGINS

CLASS 13. 6 MAY PROJECT MANAGEMENT

Preparation

Read the note titled *Project Management Background*.

Due Before Class

Upload your answers (in a pdf format) to Concept Check #5.

After Class

Read the note titled *Project Management (with Practice Problems)*. This note will be uploaded to the course website after class.

6 MAY 5:00PM LITTLEFIELD SIMULATION ENDS

CLASS 14. 7 MAY LITTLEFIELD SIMULATION DEBRIEF

In this class we will discuss key learnings from the Littlefield simulation.

Turn in Before Class

Submit a pdf of your team's Littlefield write-up (one per team). As described in the Littlefield Technologies Note: Your team should submit a summary of what actions you took during the time that you had access to the factory, an explanation of why you took those actions, and a retrospective view on whether you think you did the right thing. Show analysis to justify your conclusions. Your team's grade will be partially based on your performance, but mainly based on your summary. The summary should consist of two pages of text, with up to two more pages of supporting analyses in an attached appendix. Important: Your report should include your team name, the names of each team member, your final cash balance, and a screenshot of your "History" as an attachment (History does not count towards page limit).

CLASS 15. 13 MAY GUEST SPEAKER

Our guest speaker today will be Micah Goldstein T'02. Preparation for this class session will require some background reading and that will be distributed several days prior to class

CLASS 16. 14 MAY BUILDING A SERVICE STRATEGY

Preparation

Prepare *Enhancing Service at Southwest* for case discussion. Time allowing, we will also briefly discuss the December 2022 Southwest network failure.

Questions:

- 1. How do Southwest's operations support its strategy?
- 2. Discuss how competitors with a hub-and-spoke system could benefit/not benefit from copying Southwest's approach. Which is cheaper to run, a hub-and-spoke system or a point-to-point system?
- 3. What are the benefits of quick airplane turnaround? What is the financial impact?
- 4. Consider the questions facing Kelly (premium beverages, international partners, serving Hawaii). Are these service enhancements consistent with Southwest operations strategy?

Due Before Class

Upload your answers (in a pdf format) to Concept Check #6.

FINAL EXAMINATION:

This is a three hour exam. Access will open at 6am on Friday, May 17 and close at noon on Friday, May 17.

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