

Updated 01/16/26

Relevance of business classes to ending world hunger: epistemologies and connections, parts of a topology

Cornell University (Undergraduate Degree, Minor):

Disclaimer: This document is not intended to be a substitute for formal education. It does not involve the critical thinking and epistemological and malinative development and intellectual enrichment that a formal education entails. Reading this document may make you smarter, but it pales in comparison to the benefits derived from working hard in classes at a formal university. Please think of it as a construct parallel to a recruiting effort, meant to increase your motivation to apply yourself and pursue a similar track at Cornell or another University in order to be part of the movement of ending world hunger. In other terms, this is one intellectual loadout you can play in the game of life, and logging hours on it will develop your level.

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Intro to Business Management

Summary: one sentence

How to leverage different nodes within the architecture of a business to optimize performance.

Summary: one paragraph

Summary: one page

Summary: ~five pages

Provides an overview of management and business. Human resource, marketing, finance, and strategy concerns are addressed with consideration paid to current issues such as technological innovation and its impact on operations, globalization, ethics, teamwork, leadership, and entrepreneurship. Opportunity to deliver an integrative group project.

This course offers a comprehensive exploration of business management and organizations, covering key aspects such as organizational behavior, finance, strategy, teamwork, and leadership. Emphasis is placed on addressing contemporary issues, including relationship management and entrepreneurship. The curriculum is strategically designed to provide students with exposure to essential concepts and frameworks for analyzing, understanding, and effectively managing business enterprises. Throughout the course, we will bridge theoretical knowledge with real-world organizational situations through case studies, fostering a deeper understanding of the dynamic business landscape. Among other things, we will investigate:

- Individual behavior in organizations, including personality, motivation, decision-making, and values.
- Interpersonal behavior, including leadership, teamwork, negotiation, and power and influence.
- Organizational factors affecting business, including finance and accounting, strategy, reward systems, culture, and organizational design.

Specific Course Objectives

- Understanding Professional Business Management:
 - Gain insights into the fundamental activities and processes of professional business management.
 - Exposure to relevant concepts that form the foundation of effective managerial practices.
- Understanding Individual and Interpersonal Behavior:
 - Develop a nuanced understanding of individual behavior in organizational settings, including aspects like personality, motivation, decision-making, and values.
 - Explore interpersonal behavior, focusing on leadership, teamwork, negotiation, and power dynamics.
- Managing Groups for High Performance:
 - Acquire theoretical and practical knowledge of group dynamics.

- Learn effective team-building strategies to enhance group performance.
- Critical Reasoning and Organizational Analysis:
 - Apply critical reasoning techniques to analyze organizational structure and functions.
 - Identify root causes, address weaknesses, and leverage organizational competencies for strategic advantage.

Learning outcomes

Develop effective communication skills: You will exercise your written communication skills through analysis of business news, business case studies, and completion of the final paper. You will exercise your oral communication skills through class exercises and group work.

Attain analytical and functional competency in basic business and economic skills: AEM1200 aims to develop strong functional competence in basic business skills, and sets the foundation for business analytical skills

Demonstrate working knowledge of ethics and ability to apply to real world settings: AEM1200 introduces concepts of business ethics, corporate social responsibility, stakeholder organization, transformational leadership and personal growth in organizations, entrepreneurship, and other avenues of personal and social growth in business management.

Demonstrate ability to solve practical business and economic problems and make an impact in real world and society: AEM1200 presents the foundational tools for this goal, requires solving business case studies, and uses discussions and exams as opportunities to employ them.

Develop skills to be critical consumers of business and economic information and research: AEM1200 presents the foundational tools for this goal and provides both a set of business news analysis activities and opportunities to exercise them.

Textbook

\$323.95

Fundamentals of management, 10th edition, Ricky W. Griffin

<https://www.cengage.com/c/fundamentals-of-management-10e-griffin/9780357517345/>

Entrepreneurship and the Life Sciences

Summary: one sentence

Deepening different types of connection between the broad field of the life sciences and the machine of entrepreneurial business in the ecosystem of business at large.

Summary: one paragraph

Summary: one page

Summary: ~five pages

Robert Karpman (rk395)

The purpose of AEM 1220 is to introduce students into the world of entrepreneurship in the life sciences through the eyes of experienced life science entrepreneurs. The class will be presented as a lecture series given by well-known and respected entrepreneurs and faculty. Topics to be discussed include: • Differences between scientific investigation and entrepreneurship. • The beginnings of life science entrepreneurship. • Balancing a scientific and entrepreneurial career. • Entrepreneurship in the health professions. • The role and value of life science incubators. • Intellectual property: What is it? And how to protect it! • Ethical issues in life science entrepreneurship. • What areas in the life sciences are ripe for entrepreneurial ventures. • Academia and entrepreneurship. Students will be graded on attendance, questions derived from the lectures and a brief book review.

Textbook

\$15.96

How to fly a horse book, Kevin Ashton

<https://www.amazon.com/How-Fly-Horse-Invention-Discovery/dp/0804170061>

Agriculture and Agricultural Business Finance

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Calum Turvey cgt6

Introductory course which provides an overview of principles and practices of agricultural and development finance, from the perspectives of the business owner, lender, and policymaker. Topics include sources of capital, financing entry into agriculture, financial analysis businesses, capital management, financial statements, credit instruments, loan analysis, and financial risk. Applications in index insurance in developing countries, microfinance, guarantee funds, the Farm Credit System, crop insurance, and risk management.

- Students will learn and be able to apply financial concepts to solve financial economic problems in agriculture and development including understanding mortgages, bonds, equity, and other fundamental concepts.
- Students will gain an introductory knowledge and understanding to financing concepts including time value of money, financial and risk management instruments, among others.

Textbook

\$198.77

Financial management in agriculture, 7th edition

<https://www.amazon.com/Financial-Management-Agriculture-Peter-Barry/dp/013503759X>

Cooperative Business Management

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Todd Schmit tms1

An evaluation of the fundamental principles, structure, finance, management and governance associated with the cooperative business model, with a focus on agricultural cooperatives. Analyses of the cooperative business organization within the modern economy are emphasized through a mix of lectures, guest speakers, case study discussions and, and experiential learning projects with cooperative businesses.

- Identify economic justifications for the cooperative as a business entity.
- Illustrate unique characteristics surrounding the governance, finance, and management of cooperative businesses.
- Analyze contemporary issues facing modern cooperatives with an emphasis on challenges and opportunities facing cooperatives that compete with investor-owned firms.

Textbooks

\$PDF on computer

An Introduction to cooperation and mutualism, Michael Boland

\$PDF on computer

Cooperatives: an economic and management perspective, D.W. Cobia and B.L. Anderson

\$PDF on computer

Cooperatives: principles and practices in the 21th century, Zeuli, K.A. and R. Cropp

\$33.91

Cooperatives and Local Development: Theory and Applications for the 21st Century

\$46.75

Harvard business publishing cases :(no link

Finance

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Overview

1. Introduction to corporate finance
2. Financial statements and cash flow
3. Financial statements analysis and financial models

Valuation and capital budgeting

4. Discounted cash flow valuation
5. Net present value and other investment rules
6. Making capital investment decisions
7. Risk analysis, real options, and capital budgeting
8. Interest rates and bond valuation
9. Stock valuation

Risk

10. Lessons from market history
11. Return, risk, and the capital asset pricing model
12. An alternative view of risk and return
13. Risk, cost of capital, and valuation

Capital structure and dividend policy

14. Efficient capital markets and behavioral challenges
15. Long term financing
16. Capital structure: basic concepts
17. Capital structure: limits to the use of debt
18. Valuation and capital budgeting for the levered firm
19. Dividends and other payouts

Long term financing

20. Raising capital
21. Leasing

Options, futures, and corporate finance

22. Options and corporate finance
23. Options and corporate finance: extensions and applications

- 24. Warrants and convertibles
- 25. Derivatives and hedging risk

Short term finance

- 26. Short-term finance and planning
- 27. Cash management
- 28. Credit and inventory management

Special topics

- 29. Mergers, acquisitions, and divestitures
- 30. Financial distress
- 31. International corporate finance

Marketing

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Economics (x2)

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Section I: The basic economic problem

Unit 1: Scarcity

Unit 2: Factors of production

Unit 3: Opportunity cost

Section II: Allocation of resources

Unit 4: Market and mixed economies

Unit 5: Equilibrium price

Unit 6: Changes in demand

Unit 7: Changes in supply

Unit 8: Price elastic of demand

Unit 9: Price elasticity of supply

Unit 10: Merits of the market system

Unit 11: Market failure

Unit 12: Use of resources

Unit 13: Public expenditure versus private expenditure

Section III: The individual as a producer, consumer, and borrower

Unit 14: Specialization, exchange, and money

Unit 15: Banks

Unit 16: Stock exchanges

Unit 17: Choice of occupation

Unit 18: Differences in earnings

Unit 19: Changes in earnings

Unit 20: Trade unions

Unit 21: Motives for spending, saving, and borrowing

Unit 22: Differences in expenditure patterns

Section IV: The private firm as producer and employer

Unit 23: Types of business organizations

Unit 24: Demand for factors of production

Unit 25: Costs of production

Unit 26: Principles of profit maximization

Unit 27: Pricing and output strategies

Unit 28: Different size of firms and integration

Unit 29: Economies of scale

Section V: Role of government in an economy

Unit 30: The Government as a producer and an employer
Unit 31: Aims of Government
Unit 32: The Government's influence on private producers
Unit 33: Conflicts between Government Aims
Unit 34: Types of taxation
Unit 35: Incidence and impact of taxation

Section VI: Economic indicators

Unit 36: Consumer prices index
Unit 37: Causes and consequences of inflation and deflation
Unit 38: Employment
Unit 39: Causes and consequences of unemployment
Unit 40: Gross domestic product and economic growth
Unit 41: Living standards

Section VII: Developed and developing countries

Unit 42: Different stages of development
Unit 43: Inequality and poverty
Unit 44: Population growth
Unit 45: The effects of changes in population
Unit 46: Problems of development

Section VIII: International aspects

Unit 47: The structure of the balance of payments
Unit 48: Changing patterns of exports and imports
Unit 49: International trade
Unit 50: Exchange rates
Unit 51: Changes in exchange rates
Unit 52: Free trade and protection

Construction Planning and Operations

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages

Section One: Construction Project Management

1. Industry and the project
 - a. Intro
 - b. The construction industry
 - i. The players
 - ii. Future outlook
 - c. The construction project
 - i. Categories of construction projects
 - d. The project team
 - e. Conclusion
2. The project management process
 - a. Introduction
 - b. Project chronology
 - i. Preconstruction
 - ii. Project closeout
 - c. Conclusion
3. Construction contracts and delivery methods
 - a. Introduction
 - b. Project risk and liability
 - c. Delivery methods
 - i. Design bid build
 - ii. Construction project management
 - iii. Student union example
 - d. Contract types
 - i. Single fixed price
 - ii. Unit Price Contract
 - iii. Cost plus a fee
 - e. Contract Changes
 - i. Student union example continued
 - f. Conclusion

Section Two: Estimating

4. Estimating fundamentals
 - a. Introduction
 - b. Why estimate
 - c. Types of estimates

- i. Conceptual phase
 - ii. Schematic phase
 - iii. Design development phase
 - iv. Procurement phase
 - d. Estimate considerations
 - i. Project size
 - ii. Project quality
 - iii. Location
 - iv. Time
 - v. Other market conditions
 - e. The estimating process
 - f. Conclusion
 - 5. Conceptual and square foot estimating
 - a. Introduction
 - b. Conceptual estimate
 - i. Approach
 - ii. Data
 - iii. Adjustments
 - iv. Presentation
 - c. Square foot estimating
 - i. Approach
 - ii. Data
 - iii. Adjustments
 - iv. Presentation
 - d. Residential estimating
 - i. Approach
 - ii. Example residential estimate
 - e. Conclusion
 - 6. Assemblies estimating
 - a. Introduction
 - b. What is an assembly?
 - i. Approach
 - ii. Compilation and adjustment
 - iii. Presentation
 - c. Conclusion
 - 7. Detailed estimating
 - a. Introduction
 - b. Quantity takeoff
 - i. Organization
 - ii. Labor, material, and equipment
 - iii. Measuring quantities
 - c. Unit pricing
 - i. Pricing sources
 - ii. Material costs
 - iii. Labor costs

- iv. Equipment costs
- d. Estimate setup
 - a. Format
 - b. Overhead
 - c. Profit
- e. Conclusion

Section Three: Scheduling

8. Scheduling fundamentals

- a. Introduction
 - i. Schedule definition
 - ii. History of scheduling
- b. When to schedule
 - i. Reconstruction stage
 - ii. Construction stage
 - iii. Postconstruction stage
- c. Scheduling methods
 - i. Bar (Gantt) chart schedules
 - ii. Linear balance, network-based bar chart, and matrix schedules
 - iii. Network schedules
- d. Conclusion

9. Network construction

- a. Introduction
 - i. Network definition
- b. Why network schedules?
- c. The project planning process
 - i. Project investigation
 - ii. Activity definition
- d. The network diagram
 - i. Network Notation
- e. Network presentation
- f. Conclusion

10. Activity duration and network calculations

- a. Introduction
- b. Durations
- c. Scheduling calculations
 - i. Note notation
 - ii. Forward pass calculations
 - iii. Backward pass calculations
 - iv. Float calculations
- d. Critical path
- e. Conclusion

Section Four: Project control

11. Fundamentals of project control

- a. Introduction
- b. Basic control theory
 - i. Project control objectives

- ii. Project control cycle
 - c. Project team responsibilities
 - i. Owner
 - ii. Designer
 - iii. Construction manager
 - iv. Contractor
 - d. Cost engineering
 - e. Cost and schedule performance
 - i. Variance example
 - f. Conclusion
- 12. Cost, schedule, and resource control
 - a. Introduction
 - b. What are resources
 - i. Labor
 - ii. Equipment
 - iii. Space
 - iv. Cash
 - c. Why manage resources
 - d. Optimum project duration
 - i. Crashing
 - ii. Optimum project duration example
 - iii. Optimization conclusion
 - e. Labor and equipment studies
 - f. Cash flow analysis
 - i. Income projection
 - ii. Payment projection
 - iii. Cash flow analysis conclusion
 - g. Conclusion
- 13. Updating the project: control in practice
 - a. Introduction
 - b. Control baselines
 - i. Cost baseline
 - ii. Time baseline
 - iii. Baseline summary
 - c. Measuring project completion status
 - i. Units completed
 - ii. Incremental milestone
 - iii. Cost ratio
 - iv. Other methods
 - d. Material cost and schedule control
 - e. Labor and equipment control
 - f. Project documentation process
 - i. Documentation
 - ii. Project coordination
 - iii. Trending, forecasting, and reporting
 - g. Conclusion

Financial Accounting Principle x2

Summary: one sentence

Summary: one paragraph

Summary: one page

Summary: ~five pages