SYLLABUS

- Consult the Literature -
  (Library + Internet)
  ABI & Google
  http://library.pepperdine.edu/
  (Review Library Slideshow)

- Study.net -
  The materials for this course can be at
  http://www.study.net/
  Decision City – Thursday (Summer05)
  Make sure to have the latest browser.

- Highest Ethical Standards -
  (No Plagiarism)
  http://www.ethics.org/

BENCHMARKING KNOWLEDGE

- Read
- Discuss
- Do
Quantitative & Strategic Decision Analysis for the Firm

COURSE SYLLABUS
MBFE 656.44

"Failure is not an option!"

COURSE DESCRIPTION

This is an Internet materials based course designed to meet the challenges of distance learning and working adults. This course focuses on the application of decision support systems (DSS) to operations management. Specific DSS applications include forecasting, decision analysis, business simulation, linear programming, probability analysis and project management. Computer DSS software and the Internet are used extensively throughout this course. This is a laptop friendly class.

COURSE OBJECTIVES

This course is designed to provide an overview on the terminology, principles, practices, and methodology of quantitative decision making as applied primarily to operations management. The overall course approach is to develop a basic analytical structure applicable to a wide body of business problems. This course will focus on three specific topical areas: 1) Forecasting and Operations Planning, 2) Resource Management, and 3) Project Management and Simulation. There will be a heavy emphasis on problem formulation and computer applications. The student, upon completion of the course, should be able to apply the theory and concepts of decision analysis and quantitative reasoning to a broad range of management applications. There will be a specific focus on the application of technology and globalization. A key course objective is to prepare for the integrating business simulation experience.

The course will be conducted as a modified seminar to encourage the maximum sharing of options, experiences, and knowledge of class members. The class will be partitioned in groups for the purpose of undertaking specific assignments. Case studies and class projects will be assigned which are oriented towards computer analysis. In class discussions, the student will be called on to evaluate the applicability of course concepts, theories, and practices to their own organizational environment. A series of case studies will be used for translating the lecture material into practical business applications. It is expected that everyone will actively participate in class discussions and in-group assignments. There will be an ongoing focus on management ethics.

REQUIREMENTS & GRADING

A midterm and final exam will be given during the trimester (in-house and take-home). The in-house part of the exam will be open book and notes (your own!). Homework will be collected at the time of the exam and will count directly towards your grade. Experience indicates there exists a high correlation between homework preparation and test performance. A team oriented case study
report and presentation will be required. Team membership and leadership is the responsibility of each student. A comprehensive final examination will be administered during finals week. The following table presents the relative weights for each performance category and an example:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
<th>Example</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm - Individual</td>
<td>10</td>
<td>80</td>
<td>8.0</td>
</tr>
<tr>
<td>Midterm - Team</td>
<td>10</td>
<td>90</td>
<td>9.0</td>
</tr>
<tr>
<td>Team Homework</td>
<td>10</td>
<td>95</td>
<td>9.5</td>
</tr>
<tr>
<td>Class Participation</td>
<td>10</td>
<td>80</td>
<td>8.0</td>
</tr>
<tr>
<td>Team Presentation</td>
<td>15</td>
<td>90</td>
<td>13.5</td>
</tr>
<tr>
<td>Individual Project</td>
<td>20</td>
<td>90</td>
<td>18.0</td>
</tr>
<tr>
<td>Final</td>
<td>25</td>
<td>85</td>
<td>21.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td>87.3</td>
</tr>
</tbody>
</table>

THE FOLLOWING PROVIDES A GUIDELINE FOR THE ASSIGNMENT OF FINAL GRADES:

- **A**: 90 to 100 Indicates superior work.
- **B**: 80 to 89 Indicates average or satisfactory work.
- **C**: 70 to 79 Indicates the lowest passing grade.
- **D**: 60 to 69 Below the minimum passing grade.

Experience indicates that to earn a "B" or above you should study at least eight (8) hours per week outside of class. A plus/minus grading system will be in effect. The average for class participation is 50 points out of 100. Evaluation is based on leadership, attendance and participation. Homework is collected twice during the trimester (Midterm and Final) via an e-mail zipped attachment.

**SOURCE MATERIAL**


**INDIVIDUAL CLASS PROJECT**

The term project can focus on one of the following four areas: 1) an opportunity for applying class material at your workplace, 2) an entrepreneurial opportunity, 3) community service, or 4) a job search analysis. In the latter option, specific performance data should be collected for a number of key firms in this industry and the report should include both a self/industry SWOT and implementation timeline. A typical project outline is given on page 8. The report is to be submitted via an e-mail zipped attachment (HTML or PDF).

**TEAM CASE PRESENTATION**

Each team will be responsible for a one-hour in-class presentation. The cases are available on Decisioncity. The approach should follow the outline given in the syllabus (i.e., case study analyses). The presentation should include an industry analysis overview with financial trends. Power Point (or equivalent) should be used in making the presentation. Each case presentation should include a review of the literature and an executive summary. The presentation should last about one hour. An outline of a case presentation can be found on page 8.
<table>
<thead>
<tr>
<th>DATE</th>
<th>SUBJECT</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/05</td>
<td>Introduction</td>
<td>Chapters 1 (Read only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vision paper on Robotics (p. 7)</td>
</tr>
<tr>
<td>05/12</td>
<td>Forecasting</td>
<td>10: 3, 5, 7, 10, 19, 21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BLS Internet Exercise (^{a})</td>
</tr>
<tr>
<td>05/19</td>
<td>Relational Forecasting</td>
<td>9: 5, 11, 18, 21, 26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet Faculty Tour Write-up (^{b})</td>
</tr>
<tr>
<td>05/26</td>
<td>Process Management</td>
<td>3: Discussion questions 1, 2; Probs 3,6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team Class Exercise (p. 8)</td>
</tr>
<tr>
<td>06/02</td>
<td>Capacity Planning I</td>
<td>4: 6, 10, 12, 13, 18, 19</td>
</tr>
<tr>
<td>06/09</td>
<td>Capacity Planning II</td>
<td>Avalanche Case (^{c})</td>
</tr>
<tr>
<td>06/16</td>
<td><strong>Midterm</strong></td>
<td><strong>Team Homework Package #1</strong></td>
</tr>
<tr>
<td>06/23</td>
<td>Aggregate Planning</td>
<td>5: 1, 4, 8</td>
</tr>
<tr>
<td>06/30</td>
<td>Resource Management I</td>
<td>5 (supplement): 14, 15, 16</td>
</tr>
<tr>
<td>07/07</td>
<td>Resource Management II</td>
<td>5 (supplement): 18, 19, Briley Case</td>
</tr>
<tr>
<td>07/14</td>
<td>Supply Chain Management</td>
<td>8: 1, 2, 6, 8, Discussion #3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCM Simulation (^{d})</td>
</tr>
<tr>
<td>07/21</td>
<td>Project Management I</td>
<td>12: 1, 2, 4, 5</td>
</tr>
<tr>
<td>07/28</td>
<td>Project Management II</td>
<td>12: 9, 12, 14, 23</td>
</tr>
<tr>
<td>08/04</td>
<td>Final Exam</td>
<td><strong>Team Homework Package #2</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Individual Term Project</strong></td>
</tr>
</tbody>
</table>

\(^{a}\) Select data from [http://stats.bls.gov/](http://stats.bls.gov/) and develop several forecasts.

\(^{b}\) Tours: [http://www.rowan.edu/business/FACULTY/ross/BP/FACTORYTOUR/FACTORYTOUR.htm](http://www.rowan.edu/business/FACULTY/ross/BP/FACTORYTOUR/FACTORYTOUR.htm)

\(^{c}\) A 1 to 2 paragraph summary of your proposed individual project is due via e-mail (p. 9).

\(^{d}\) A 2 to 3 page team executive summary of the experience: [http://beergame.mit.edu/default.htm](http://beergame.mit.edu/default.htm)

* Homework is collected twice during the trimester and should include all assignments *

** BE PREPARED AT ALL TIMES **
SUMMARY OF DELIVERABLES

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Robotics Paper (Individual)</td>
<td>Before 05/12/05 (e-mail)</td>
</tr>
<tr>
<td>2. Team Class Exercise</td>
<td>05/26/05</td>
</tr>
<tr>
<td>3. Power News Briefs (Individual)</td>
<td>As scheduled</td>
</tr>
<tr>
<td>4. BLS Exercise (Team)</td>
<td>With Homework Package #1</td>
</tr>
<tr>
<td>5. Internet Tour (Individual)</td>
<td>With Homework Package #1</td>
</tr>
<tr>
<td>6. Project Proposal (Individual)</td>
<td>06/09/05</td>
</tr>
<tr>
<td>7. Avalanche Case (Team)</td>
<td>With Homework Package #1</td>
</tr>
<tr>
<td>8. Team Homework Package #1</td>
<td>06/16/05 (e-mail attachment)</td>
</tr>
<tr>
<td>9. Team 1-Hour Presentations</td>
<td>As scheduled</td>
</tr>
<tr>
<td>10. Team SCM &amp; OPS Sim Write-ups</td>
<td>With Homework Package #2</td>
</tr>
<tr>
<td>11. Team Homework Package #2</td>
<td>08/04/05 (e-mail attachment)</td>
</tr>
<tr>
<td>12. Individual Term Project</td>
<td>08/04/05 (e-mail attachment)</td>
</tr>
</tbody>
</table>

DECISIONCITY CONTENTS

- Chapter lecture notes (PowerPoint)
- Course software
- Cases
- Sample individual project
- Sample team presentation
- On-line examinations
- Homework solutions
- Software instruction

STUDYNET LOG-ON PROCEDURE

- Connect to [http://www.study.net/](http://www.study.net/)
- Enter your name and password.
- Click on the courses menu.
- Select Decision City – Thursday (Summer05) from the courses menu.
- Select the lesson assignment for the week.

USING THE PEPPERDINE LIBRARY

- Go to [http://library.pepperdine.edu/](http://library.pepperdine.edu/) (a backup is the Graziadio Portal).
- You may have problems accessing the library through a firewall.
- Select the desired library catalog.
- Two helpful business sources are ABI (articles) and Google.
- Enter keyword(s) and press search.
- Review the abstract before reading the full text article.

TEAM HOMEWORK PACKAGE

The team is responsible for assigning individual problems to each team member. The team homework packages should contain the following and is to be submitted digitally:

- Table of contents
- Team responsibility sheet.
- Tabs for each assignment
- Summary answers for each chapter
- Annotated computer printouts for each problem
- Pagination
CANDIDATE CASE STUDIES

Each case presentation should include a review of the literature and an overview on current industry operations and practice. The presentation should last about one hour. Presented in the following are several candidate case studies that will be assigned on the first night of class. These cases are available on Decision City – Thursday (Summer05).

1. Motor King Auto Products (Capacity Planning)

The production manager at Motor King Auto Products wishes to determine the optimal production plan for the firm’s new gas extender product.

2. Maple Leaf (Capacity Planning)

The management at Maple Leaf wishes to determine the optimal production schedule and expansion plan for their paper products distribution network.

3. Green House Mills (Aggregate Planning)

The operations manager at Green House Mills wishes to formulate an aggregate plan for providing raw wood to the company’s five processing mills.

4. Hackney Rental Cars (Resource Allocation)

The general manager at Hackney Rental Cars wishes to determine an optimal fleet purchasing plan for the upcoming years.

5. Jilltronics (Supply Chain Management)

The production manager at Jilltronics is interested in developing a value added supply chain plan for coordinating both internal and external suppliers.


The management at B&W Systems wishes to develop a fast track schedule and budget plan for an Internet based forecasting software project.

TEAM WORK & ETHICAL BEHAVIOR

One of the great strengths of the Pepperdine MBA program is the wealth of real-world experience that students bring to class. One way to draw from this vast resource is to make liberal use of teamwork in a variety of class assignments. Homework is a team effort. Experience shows that students who regularly work together learn more and perform at a higher level than those who chose to work alone. Typically, team activities often provide as much or more insight into the managerial process as any in-class exercise or reading. View your team as a personal trainer designed to keep you focused and your spirits high! The current trends in business practice underscore the increasing importance of teamwork. Additionally, a team approach insures the availability of notes and handouts when an individual member of the team cannot attend class. All team efforts must be accompanied by a sign off sheet, which all team members must sign, indicating your approval of the material being turned in. If you do not participate in the team assignment then you must not sign
off on the package. There will be absolutely no tolerance for any form of cheating including plagiarism. GSBM students are expected to respect personal; honor and the rights and property of others at all times. The University rules on conduct can be found in the GSBM Catalog. Additionally, students with disabilities are encouraged to familiarize themselves with the University’s Policy on Disabilities in the GSBM Catalog or contact the University’s equal opportunity officer at (310) 506-4208.

POWER BUSINESS NEWS BRIEFS

Reading the business section of the "LA Times" or the "Wall Street Journal" on a daily basis is essential for remaining current in the dynamics of modern management practice. Accordingly, each student will be responsible for a presenting a three to five minute business news brief over the course of the trimester. The presentation schedule will be made on the first night of class. The presentation should feature some aspect of quantitative business analysis. However, the choice of subject material is entirely up to your discretion. Be sure to indicate something positive that occurred during the week. The LA Times Web site is http://www.latimes.com/.

EXAMINATIONS

The in-class examinations (midterm and final) will consist of 50 multiple choice questions, primarily focusing on concepts and vocabulary. The take home examination is a team effort and consists of several businesses oriented cases. Each team examination must include a narrative discussion of the problem situation and the results of the analysis. The computer printouts must be adequately annotated. The submitted examination should only reflect the work of the team. The team exam should include supporting literature. The Team exam is to be submitted electronically via an e-mail attachment (HTML or PDF). A practice mid term and final are posted on Decisioncity.

COURSE SOFTWARE

Most of the problems assigned in this course can be solved using the Java applets. Furthermore, they can be used to support the team class presentation, the team midterm examination and the individual term project. All computer printouts must be adequately annotated including problem number and discussion. Typically, the class will spend time each week discussing and solving homework problems. You can also choose to use another courseware package.

INTERNET COMPANY TOURS

The following web site contains the company tour assignments made on page 4. http://www.rowan.edu/business/FACULTY/ross/BP/FACTORYTOUR/FACTORYTOUR.htm Prepare a 1 to 2 page summary of your company tour. These assignments are to be turned in with your team homework package (one write-up per team member). You may select an alternative tour to the one suggested.

ROBOTICS VISION PAPER (05/12/05)

Prepare a two-page paper on your vision regarding the future applications of robotics throughout the management process. Comment on any potential ethical issues. Consult the literature via the Pepperdine library (web) to support your discussion. E-mail your write-up before 05/12/05.
CASE STUDY ANALYSIS

1. INTRODUCTION

The case study approach offers the student the opportunity to apply quantitative method techniques first hand to actual business situations. This is in contrast to the traditional method of instruction that has focused primarily on theoretical considerations and small model applications. The following presents the basic steps used in analyzing and presenting (oral and written) a technical case. A team approach provides the student with insights into the dynamics of group problem solving.

2. STEPS IN ANALYZING A CASE (Check List)

2.1 Preview Case
2.2 In-depth Review
2.3 Problem Formulation
2.4 Develop Goals & Objectives
2.5 Identify Alternatives
2.6 Formulate Model
2.7 State Assumptions
2.8 Collect Data
2.9 Develop Solution
2.10 Test Solution (Sensitivity Analysis)
2.11 Analyze Results
2.12 Prepare Action Plan

3. PRESENTING THE CASE (ORAL & WRITTEN)

3.1 Present Overview (Executive Summary)
3.2 Summarize Findings
3.3 Problem Statement
3.4 Analysis of Alternatives
3.5 Detailed Recommendations
3.6 Action Plan

In making an oral presentation, the team should be:

- Professional in appearance & behavior
- Adequately prepared & to the point
- Courteous & constructive
- Ideas oriented
- Non-repetitive
- Use a pointer

INTERNET and the LITERATURE

Graduate students need to spend considerable time reviewing and analyzing the technical literature. An ongoing review of the literature is particularly important for this course. Fortunately, recent developments involving the Internet provide the student with ready access to the wealth of information contained in the literature. Each student and study team should take advantage of this technological marvel. Two helpful library resources are ABI/Inform and Lexis/Nexis statistical.

TEAM CLASS EXERCISE (05/26/05)

Prepare a 10-minute PowerPoint presentation on process management based on the following team assignment. Use the Pepperdine Library to support your findings.

<table>
<thead>
<tr>
<th>Team</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chemical</td>
</tr>
<tr>
<td>2</td>
<td>Delivery</td>
</tr>
<tr>
<td>3</td>
<td>Automotive</td>
</tr>
<tr>
<td>4</td>
<td>Banking</td>
</tr>
<tr>
<td>5</td>
<td>Communications</td>
</tr>
<tr>
<td>6</td>
<td>Software</td>
</tr>
</tbody>
</table>
INDIVIDUAL PROJECT OUTLINE & CONTENT

The project should focus on either a task at your workplace, an entrepreneurial opportunity, community service, or a job search. Obviously, the actual content of your report will vary considerably depending on the selected topic. An e-mail summary of your proposed project will be due no later than **06/09/05**. The following outlines a typical individual project outline:

- Introduction (including problem statement)
- Executive Summary
- Presentation of Data
- Literature Search Summary
- SWOT Analysis
- Methodology
- Results Analysis
- Conclusions

Additionally, the data and computer analysis should appear in one or more appendices. While some form of computer analysis obviously would be helpful it is not required. For example you may elect to use a business planning software package to help shape your entrepreneurial venture. The report is to be submitted via an e-mail attachment as a zipped word or pdf file.

TEAM PRESENTATION OUTLINE

- The overall presentation should last no more than one hour.
- The team presentation should contain the following elements:
  1. An overview on the history of the topic including descriptive statistics, slants and trends.
  2. A review of the basic principles regarding the topical material under study. This should include chapter highlights and several examples.
  3. A well-defined problem statement put into the context of the chapter material plus a detailed computer analysis and interpretation of the results.
  4. An overview of current industry practice regarding the application including specific examples.

- A copy of the slide show and an executive summary of your findings is to be turned in on the night of the presentation.
- Experience shows that involving the class in the presentation significantly improves the overall performance. This can be accomplished through a quiz show format or having specific questions regarding the material occur during the presentation. You may wish to consider having some type of prize for correct answers.

GENERAL STUDY GUIDELINES

The following outlines the recommended study approach for this course:

- You should plan to spend approximately **8 to 10 hours** per week on the course material. Usually, more time is required for the midterm and final examinations.
- Typically, you should plan to **meet** with your study team at least once per week.
- You should read the assigned material before class. You may wish to start by reviewing the **summary highlights** at the end of the assigned chapters and the PowerPoint lecture notes.
- Class time will be devoted to a review of the material followed by either a case presentation or Internet based computer applications.
- The in-house exams (midterm and final) will be open book, open notes, laptops.
- Take the practice Internet session exams each week.
CONDUCT

The University expects from all of its students and employees the highest standard of moral and ethical behavior in harmony with its Christian philosophy and purposes. Engaging in or promoting conduct or lifestyles inconsistent with traditional Christian values is not acceptable.

The following regulations apply to any person, graduate or undergraduate, who is enrolled as a Pepperdine University student. These rules are not to be interpreted as all-inclusive as to situations in which discipline will be invoked. They are illustrative, and the University reserves the right to take disciplinary action in appropriate circumstances not set out in this catalog. It is understood that each student who enrolls at Pepperdine University will assume the responsibilities involved by adhering to the regulations of the University. Students are expected to respect order, morality, personal honor, and the rights and property of others at all times. Examples of improper conduct for which students are subject to discipline are as follows:

- Dishonesty in any form, including plagiarism, illegal copying of software, and knowingly furnishing false information to the University.
- Forgery, alteration, or misuse of University documents, records, or identification.
- Failure to comply with written or verbal directives of duly authorized University officials who are acting in the performance of assigned duties.
- Interference with the academic or administrative process of the University or any of the approved activities.
- Otherwise unprotected behavior that disrupts the classroom environment.
- Theft or damage to property.
- Violation of civil or criminal codes of local, state, or federal governments.
- Unauthorized use of or entry into University facilities.
- Violation of any stated policies or regulations governing student relationships to the University.

Disciplinary action may involve, but is not limited to, one or a combination of the alternatives listed below:

- **Dismissal** – separation of the student from the University on a permanent basis.
- **Suspension** – separation of the student from the University for a specified length of time.
- **Probation** – status of the student indicating that the relationship with the University is tenuous and that the student’s records will be reviewed periodically to determine suitability to remain enrolled. Specific limitations to and restrictions of the student’s privileges may accompany probation.” GSBM Catalog, pgs. 204-205.
PEPPERDINE UNIVERSITY MISSION STATEMENT

The mission of Pepperdine University, as a Christian university, is to create a learning community of academic excellence and value-centered education in which students prepare for lives of purpose, service and leadership.

GSBM TEACHING PHILOSOPHY OBJECTIVES

• To develop positive and supportive attitudes towards oneself and others.
• To cultivate skills in problem solving and decision-making.
• To formulate an understanding of the interactive nature of modern business practice.
• To develop a values-centered approach to leadership.

CLASS QUOTATION

Believe in yourself, what you think, what you feel,
Believe in the truth, the good, the ideal,
Believe that your dreams can someday become real...
Forever and always, believe

Amanda Bradley

PEPPERDINE UNIVERSITY AFFIRMS

THAT GOD IS

That He is revealed uniquely in Christ
That the educational process may not, with impunity,
be divorced from the divine process
That the student, as a person of infinite dignity,
is the heart of the educational enterprise
That the quality of student life
is a valid concern of the University
That truth, having nothing to fear from investigation,
should be pursued relentlessly in every discipline
That spiritual commitment, tolerating no excuse for mediocrity,
demands the highest standards of academic excellence
That freedom, whether spiritual, intellectual, or economic,
is indivisible

That knowledge calls, ultimately, for a life of service.