MSE 602 - ADVANCED ENGINEERING MANAGEMENT
M, 7:00 - 9:50 pm, Ticket 56405, Spring 2003

Instructor	Dr. Bonita Campbell, Professor of Engineering Faculty Office: EA 1317; (818) 677-2484; email bjc20362@csun.edu Department of Manufacturing Systems Engineering and Management Department Office: EA 1308; (818) 677-2167; email msem@csun.edu MSE 602 Office Hour: M, 6:00 - 6:50 pm
Texts	Rhonda M. Abrams, **The Successful Business Plan: Secrets and Strategies**, Third Edition (ISBN 0-9669635-2-0) Mark Dodgson, **The Management of Technological Innovation: An International and Strategic Approach**, (ISBN 0-19-877535-0)
Course Packet	Available at Northridge Copy Center, 9130-B Reseda Blvd., Northridge, 818-775-0255 [small storefront shop, southeast corner of Reseda and Dearborn (Dearborn is one block north of Nordhoff)]
Reserve Book Room	**Engineering Management References, Volumes B, E** and **I**; compiled by B. J. Campbell (example proposals prepared by student teams; Volume E also includes student recommendations) **The Money Connection**; Lawrence Flanagan **Start Your Business: A Beginner's Guide**; Vickie Reierson **Starting and Operating a Business in California**; Michael D. Jenkins **The Successful Business Organizer;** Rhonda Abrams
Course Purpose	This course is designed to facilitate the student's development of long-term and strategic cognitive and affective capabilties for the effective management of significant engineering and technology endeavors.
Course Structure	There are three learning activity tracks that run in parallel throughout this course. One track entails presentations and discussions of topics particularly pertinent to advanced engineering and technology management. A second track involves reading assignments, multiple-choice quick quizzes, and discussions addressing the management of technological innovation. The third track is the team development of an entrepreneurial or intrapreneurial venture proposal plan.

COURSE PLAN

Week	Date	Topic Area(s)	Format / Assignments
01	01/27	Introduction; About Groups	• Completion of information form (provided with syllabus) • Presentation (course packet) • Read Dodgson, Chps 1 and 2, for discussion Week 02
02	02/03	Technology and Innovation	• Formation of venture proposal teams • Discussion of Dodgson, Chps 1 and 2 • Presentation (course packet) • Read Dodgson, Chps 3 and 4, for discussion Week 03
03	02/10	Technological Forecasting	• Review of venture proposal teams composition • Discussion of Dodgson, Chps 3 and 4 • Presentation (course packet) • Read Dodgson, Chp 6
04	02/17	Technological Strategy	• Multiple-Choice Quiz, Dodgson, Chps 1-4 and 6 • Presentation (course packet) • Team work session time
05	02/24	Venture Proposals	• **Team presentations - venture concepts and work plans** • Class assessments of team presentations • Submission of team developer reports (to be distributed in class) • Read Dodgson, Chp 5, and *Los Angeles Olympic Organizing Committee - LAOOC* (in course packet), for discussion Week 06
06	03/03	Evolving Organizations	• Discussion of Dodgson, Chp 5, and *LAOOC* • Presentation (course packet) • Read Dodgson, Chp 7, for discussion Week 07
07	03/10	Entrepreneurship/ Intrapreneurship	• Discussion of Dodgson, Chp 7 • Presentation (course packet) • Read Dodgson, Chp 8
08	03/17	Form and Financing	• Multiple-Choice Quiz, Dodgson, Chps 5 ,7, 8, and *LAOOC* • Presentation (course packet) • Venture capitalist videotape and discussion
09	03/24	Venture Proposals	• **Team presentations - interim proposals** • Class assessments of team presentations • Submission of team developer reports (distributed in class)
10	03/31	~~~~~Cesar Chavez Day~~~~~	
11	04/07	Intellectual Property - 1	• Presentation (course packet) • Review course packet pages 11/3-39 through 11/3-64 in preparation for patent attorney videotape on 04/22
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12	04/22	Intellectual Property - 2	• Presentation (course packet) • Patent attorney videotape and discussion
13	04/29	Venture Proposals	• Team Work Session
14	05/06	Venture Proposals	• Team Work Session
15	05/13	Venture Proposals	• **Team presentations - final proposals** • Class assessments of team presentations • Submission of team developer reports (distributed in class)
16	05/20	Catch up / Wrap up	• Final venture proposal documents due • Team member final assessments due (provided with syllabus)

STANDARD OPERATING PROCEDURES

1. Class members are encouraged to maintain personal and professional standards consistent with The Fundamental Principles of the Code of Ethics of the Accreditation Board for Engineering and Technology; i.e.,

> ***Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:***
> - *using their knowledge and skill for the enhancement of human welfare;*
> - *being honest and impartial, and serving with fidelity the public, their employers and clients;*
> - *striving to increase the competence and prestige of the engineering profession; and*
> - *supporting the professional technical societies of their disciplines.*

2. Withdrawing from (dropping) this course should be accomplished during the first two weeks of instruction. Please note that failure to *officially* drop this class results in a grade of U, which is the equivalent of an F for your transcript and grade point average. For additional information regarding withdrawals, see FAQs at <www.csun.edu/~msem>.

3. It is a University requirement that all undergraduate and graduate students *must pass* the Writing Proficiency Examination (WPE) as part of earning their degree. Graduate students *must pass* the WPE before completing more than 12 units in their graduate program. Students who earned an undergraduate degree at CSUN in Spring 1982 or thereafter have already met the WPE requirement. Delaying the completion of the WPE requirement can delay your graduation. For additional information, see FAQs at <www.csun.edu/~msem>.

4. It is a University requirement that all graduate students whose undergraduate degree grade point average was less than 3.0, and who have not taken the General Aptitutde Test of the Graduate Record Examination (GRE), *must* take the test before completing more than 12 units in their graduate program. A delay in meeting the GRE requirement will delay your classificaiton and can delay your graduation. Information on the test is available at <www.gre.org> or at FAQs at <www.csun.edu/~msem>.

5. The major of each student in this class will be verified using the University course roster.

Students whose majors are not correct must submit a change of major within the first three weeks of the semester. Graduate students should submit a *Change of Objective for Graduate Students* to the MSEM Department Office. The form can be obtained from FAQs at <www.csun.edu/~msem>.

6. The classification status of each graduate student in this class will be verified using the University course roster. Conditionally classified graduate students who are eligible for classification must submit a *Request for Classification* during the first three weeks of the semester. Eligible students are in the correct major and in GRAD status, have met their WPE and GRE requirements, and have a GPA of 3.0 or better. For additional information, see FAQs at <www.csun.edu/~msem>.

7. Class members are expected to attend class sessions and to be prompt.

8. Class members are expected to be considerate and respectful of their colleagues, particularly in regard to the venture proposal preparation presentations.

9. Class members are responsible for material in reading assignments, class presentations and class group discussions.

10. Budgeting 5-6 hours per week for this course, in addition to class attendance, is not unreasonable.

11. Class presentations are not replications of reading assignments.

12. Class members are expected to prepare for and participate constructively in group discussions and team meetings.

13. The Abrams book is to be used as a primary source book for venture proposal development.

14. Hard copies of visuals used for team presentations must be provided to the instructor.

15. All graduate students majoring in MSEM Department programs (i.e., Automation Engineering, Engineering Management, Materials Engineering) are encouraged to add their email addresses to the Department listing. This listing is used for special notifications (e.g., course scheduling changes, academic advisement notices, social events, and emergencies). The list may be accessed at <*www.csun.edu/~msem/faqs.htm*>, or by emailing a request to *msem@csun.edu* to be added to the list.

EVALUATION COMPONENTS

05% Attendance
05% Discussion participation
30% Two multiple-choice quizzes on reading assignments (15% each)
10% Assessments (Your assessments of venture proposal presentations by other teams)
- 03 Concept and Work Plan
- 03 Interim Proposal
- 04 Final Proposal

50% Venture Proposal Plan ***(Team Score x Individual Contribution Multiplier)***

Team Score:
- 20 Team Presentations *and* hardcopies of the presentations
  - 05 Concept and Work Plan Presentation
  - 05 Interim Proposal Presentation
  - 10 Final Proposal Presentation
- 30 Written Proposal

Individual Contribution Multiplier
- 0.0 → 1.0 Instructor evaluation of team developer reports
- 0.0 → 1.0 Instructor evaluation of team and team member assessment reports

Each venture proposal must incorporate a technology component and an international component. The venture may be a physical product or a service. The format in Abrams is to be used for the written report.

Letter Grade Scale: A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = 0-59
Plus/Minus Grading will ***NOT*** be used