

ASSIGNMENT SCHEDULE

Due Thurs., 8-23

See syllabus *I. Intro. to MOT*
Betz, Chapter 1

Due Tues., 8-28

See syllabus *II. Positioning Strategies in Manufacturing and Services*
Supplement on Operations Technology from Chase, Aquilano, Jacobs
R Gaimon, Cheryl, Karen Napoleon, "Information Technology - Worker Systems in Structured and Unstructured Decision Making Environments," in Service Product Development, J. A. Fitzsimmons, Ed., Sage Publications, 2000.
Betz, "Technologies of Power and Thinking," pp. 35-6.
Background reading from Betz also suggested on syllabus.

Due Thurs., 8-30

See syllabus *III. Improving a Firm's Competitive Performance*
R Dyer, Ouchi, "Japanese-Style Partnerships: Giving Companies a Competitive Edge," Sloan Management Review, Fall 1993.
O Cusumano, "The Limits of Lean," Sloan Management Review, Summer 1994.

Due Tues., 9-4

See syllabus *III. Improving a Firm's Competitive Performance*
C *Case 1: Campbell Soup*
Note: Read Betz, "Research Organization," pp. 262-264 middle.
GRADUATE SECTION: GROUP PROJECT ASSIGNMENT DUE (see syllabus)

Due Thurs., 9-6

See syllabus *III. Improving a Firm's Competitive Performance*
Betz: Case-"Minicomputer Word Processing," pp. 241-2; "Engineering Logic," pp. 243-245 top; Start with "Dynamics of High-Tech Products, pp. 290-296.

CAMPUS CLOSED Tues., 9-11

Due Date: Thurs., 9-13

See syllabus *III. Improving a Firm's Competitive Performance*
R Project Management Manual, Harvard Business School, #9-697-034, 10/97
O Franza, Richard, Cheryl Gaimon, "Flexibility and Pricing Decisions for High Volume Products with Short Life Cycles," International Journal of Flexible Manufacturing Systems, Volume 10, 1998, 43-71.
NOTE: I will also accept a one-page summary for the Franza & Gaimon article on Tuesday, 9-18.

Due Date: Tues., 9-18

See syllabus *III. Improving a Firm's Competitive Performance*

- O There are 3 Fortune articles tracking Boeing's recent problems. The optional one-page write-up should be a *synthesis of key points from any two articles*.
Henkoff, Ronald, "Boeing's BIG Problem," Fortune, January 12, 1998.
Labich, Kenneth, "Boeing Finally Hatches a Plan," Fortune, March 1, 1999.
Useem, Jerry, "Boeing Vs. Boeing," Fortune, October 2, 2000.

NOTE: I will also accept a one-page summary for the Franza & Gaimon article posted as due on Thurs. 9-13.

Due Date: Thurs., 9-20

See syllabus *III. Improving a Firm's Competitive Performance*

- O Teal, Thomas, "Service Comes First: An Interview with USAA's Robert F. McDermott," Harvard Business Review, 1987. (I will ONLY accept summaries on 9-20.)
- O Wal Mart Stores (THIS WRITE-UP IS OPTIONAL. IF YOU CHOOSE TO WRITE-UP THIS READING, A ONE-PAGE SUMMARY IS ALL THAT IS NEEDED– DESPITE THE FACT THAT THIS IS A CASE.) We will start to discuss Wal Mart on Thurs. and finish our discussion on Tues. 9-25. (I will accept summaries either on Thurs. 9-20 or Tues. 9-25.)

Due Date: Tues., 9-25

See syllabus *IV. Technological Innovation, Diffusion, Transfer*.

Betz: Case-"Sikorsky's Helicopter," pp. 40-42; Start with "Role...Society" pp. 47-49; Start with "Impact of Scale..." pp. 50-52; "Case-US R&D Infrastructure," pp. 75-77; "Technology Push Versus Pull," pp. 117-118; "Risks...Innovation," pp. 119-121 top.

START READING: Betz: Chapter 4.

Due Date: Thurs., 9-27

See syllabus *IV. Technological Innovation, Diffusion, Transfer*.

FINISH READING: Betz: Chapter 4.

Graduate Section: GROUP PROJECT UPDATE (see syllabus for details)

Due Date: Thurs., 10-4

See syllabus *IV. Technological Innovation, Diffusion, Transfer*.

Betz: "Culture and Roles..." pp. 100-102.

- R von Hippel, Eric, The Sources of Innovation, Oxford Univ. Press, NY, 1988; pp. 11-42. TO WRITE YOUR ONE-PAGE SUMMARY, PLEASE USE THE OUTLINE IN THE LECTURE NOTES AS A GUIDE. YOU DO NOT HAVE TO FILL-IN EACH SECTION OF THE OUTLINE SINCE THIS WOULD LIKELY REQUIRE MORE THAN ONE PAGE. HOWEVER, PLEASE FILL-IN AT LEAST ONE INDUSTRY ENTRY WITHIN EACH OF THE CATEGORIES 1.1, 1.2, AND 1.3. For example, you may fill-in the outline for scientific instruments, tractor shovels, and wire termination, only (one industry in each category).

Due Date: Tues., 10-9

See syllabus *IV. Technological Innovation, Diffusion, Transfer.*

Read lecture notes tutorial on "Innovation of Production Planning & Control Systems", approximate pages 52-to end of Section IV. This material is important background to the Cusumano reading (below).

- R Cusumano, Michael, "Manufacturing Innovation: Lessons from the Japanese Auto Industry," Sloan Management Review, Fall 1988.
Betz: "Case-Japanese MITI-LSI Chip Project" pp. 93-95 and 97-8.

Due Date: Thurs., 10-11

See syllabus *IV. Technological Innovation, Diffusion, Transfer.*

PLEASE READ:

- R Pisano, Gary, Steven Wheelwright, "The New Logic of High-Tech R&D," Harvard Business Review, September-October 1995.
Betz: "Case-Origin of Biotechnology" pp. 78-84 and 86-89; "Case-Process Innovation at Bristol-Meyer Squibb" pp. 299-301.

Tues., 10-16 Recess

Due Date: Thurs., 10-18

See syllabus *IV. Technological Innovation, Diffusion, Transfer.*

- C Case 2: *Rogers Corp.*

Please insert the following text into your notes. It is part of the explanation of the sources of innovation and is based on the reading: von Hippel, Eric, The Sources of Innovation.

Schumpeter (an economist) offered the following theory to explain the sources of innovation.

"Those who succeed at innovation are rewarded by having a temporary monopoly control over what they have created. The control is the lever that allows innovators to gain enhanced position in the market and related temporary profits or 'economic rents' from their innovations."

Due Date: Tues., 10-23

See syllabus *V. Strategy, Knowledge, Organizational Structure*

PLEASE READ:

- Betz: Start with "Technology Leader..." pp. 314-320; pp. 129-132 middle.
R Burgelman, Robert, "Fading Memories: A Process Theory of Strategic Business Exit in Dynamic Environments," Administrative Science Quarterly, 1994.
Betz: "Case-Xerox..." pp. 264-266 top; "Case-Apple..." pp. 268-272; "Case-Intel..." pp. 273-5.

NOTE: THE BOOKSTORE NOW HAS THE LEONARD BARTON & HAYES & CLARK ARTICLES BUT ONLY ON THE SHELVES FOR MGT 3610.

Due Date: Thurs., 10-25

See syllabus *V. Strategy, Knowledge, Organizational Structure*

PLEASE READ:

- O Leonard Barton, Dorothy, H. Kent Bowen, Kim B. Clark, Charles A. Holloway, Steven Wheelwright, "How to Integrate Work and Deepen Experience," Harvard Business Review, September-October 1994.
Betz: "Make-Buy Design Decisions" pp. 287 bottom-288.

Due Date: Tues., 10-30

See syllabus *V. Strategy, Knowledge, Organizational Structure*

PLEASE READ:

- O Henderson, Rebecca, Managing Innovation in the Information Age," Harvard Business Review, January-February 1994.

Please refresh yourself on these readings to be covered in class:

- Betz: "Case-Xerox..." pp. 264-266 top; "Case-Apple..." pp. 268-272; "Case-Intel..." pp. 273-5.
Betz: "Make-Buy Design Decisions" pp. 287 bottom-288.

Graduate Section: GROUP PROJECT UPDATE (see syllabus for details)

Due Date: Thurs., 11-1

See syllabus *V. Strategy, Knowledge, Organizational Structure*

PLEASE READ:

- R Cultivating Capabilities to Innovate: Booz-Allen & Hamilton (one page summary required)
Betz: "Case-Five Companies Benefit from IT..." pp. 146-8.

Due Date: Tues., 11-6

See syllabus *VI... Productivity and Quality: Measurement in Manufacturing*

PLEASE READ:

- R Hayes, Clark, "Why Some Factories are More Productive than Others," Harvard Business Review, Sept. - Oct. 1986.
- O Grover, Varun, Manoj Malhotra, "Business Process Re-engineering: A Tutorial on the Concept, Evolution, Method, Technology, and Application," Journal of Operations Management, Vol. 15, 1997.

PLEASE INFORM ME IF YOU ARE GRADUATING THIS SEMESTER SO I CAN ARRANGE FOR AN EARLY WRITTEN FINAL EXAM.

Due Date: Thurs., 11-8

See syllabus *VI... Productivity and Quality: Measurement in Services*

PLEASE READ:

- R "A Measure of Delight: The Pursuit of Quality at AT&T Universal Card Services" (one page write-up)
- O Thanassoulis, Emmanuel, "Data Envelopment Analysis and its Use in Banking," Interfaces.

NOTE TO GRAD CLASS: EACH STUDENT IS REQUIRED TO COMPLETE TWO 2-PAGE CASE WRITE UPS (SEE QUESTIONS IN SYLLABUS) -- THERE ARE ONLY TWO CASES LEFT INCLUDING VANDELAY.

Due Date: Tues., 11-13

See syllabus VI... Productivity and Quality

C Case 3: "Vandelay Ind. Inc.,"

Due Date: Thurs., 11-15

See syllabus VI... Knowledge Management

PLEASE READ:

R "Productivity and Performance Systems: A Comparative Analysis of Northern Telecom and United Parcel Service" (one page write-up)

Due Date: Tues., 11-20

See syllabus VI... Justification of New Technology (Uncertainty, Technology Choice)

PLEASE READ:

- O Roger E. Bohn, "Measuring and Managing Technological Knowledge", Sloan Management Review, Fall 1994.
- O Carrillo, Janice, Cheryl Gaimon, "Managing Knowledge-Based Core Capabilities Under Uncertainty," Working Paper, 2001.

NO CLASS Thurs., 11-22

GRADUATING STUDENTS: EARLY FINAL EXAM WILL BE GIVEN NEXT WEEK (TIME/LOCATION TBA)

Due Date: Tues., 11-27

See syllabus VI... Justification of New Technology (Uncertainty, Technology Choice)

C Case 4: *Solagen: Process Improvement in the Manufacture of Gelatin at Kodak*

Graduate Section: GROUP PROJECT REPORT DUE (see syllabus for details).

PLEASE TURN IN TWO COPIES OF THE REPORT.

UNDERGRADUTE GROUPS: PLEASE WRITE A 2-PAGE SUMMARY AND CRITIQUE OF THE PROJECT YOU PRESENT. THE WRITTEN REPORT IS DUE THE DAY OF YOUR PRESENTATION.

Due Date: Thurs., 11-29

See syllabus VI.. Implementation of New Technology

PLEASE READ:

R Chew Bruce, Dorothy Leonard-Barton, Roger E. Bohn, "Beating Murphy's Law," Sloan Management Review, Spring 1991.

O Gaimon, Cheryl, "Planning Information Technology - Worker Systems,"
Management Science, September, 1997.

First project presentation (20 minutes maximum)

Due Date: Tues., 12-4

4 Project presentations (20 minutes maximum)

Due Date: Thurs., 11-29

4 Project presentations (20 minutes maximum)

**THE FINAL EXAM FOR MGT/ISYE 6772 AND MGT 3610 IS SCHEDULED
FOR FINAL EXAM PERIOD 3, MONDAY, DECEMBER 10, FROM
2:50-5:40, IN IC 205. THE EXAM IS CLOSED BOOK.**