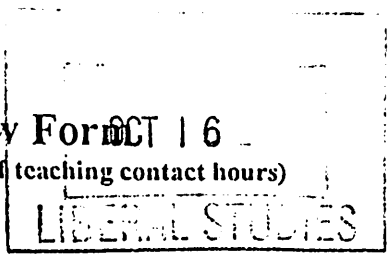
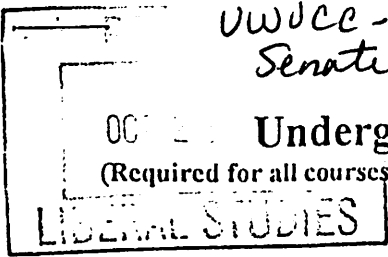


UWUCC - 10/30/01  
Senate 12/4/01

01-31c



Undergraduate Distance Education Review Form OCT 16  
(Required for all courses taught by distance education for more than one-third of teaching contact hours)

Existing and Special Topics Course

Course: MGMT 330 Productions and Operations Management

Instructor of Record: Soni/Nagendra phone: 7-7786/7-4880 e-mail: rgsoni/nagendra

**Step One:** Attach signed Budget Approval Form to this form.

**Step Two:** Department or its Curriculum Committee

The committee has reviewed the proposal to offer the above course using distance education technology, and responds to the CBA criteria as follows:

- 1. Will a qualified instructor teach the course?  Yes  No
- 2. Will the technology serve as a suitable substitute for the traditional classroom?  Yes  No
- 3. Are there suitable opportunities for interaction between the instructor and student?  Yes  No
- 4. a. Will there be suitable methods used to evaluate student achievement?  Yes  No
- b. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty)  Yes  No

5. Recommendation:  
 Positive (The objectives of the course can be met via distance education.)

Negative  
signature of department designee: Jettil Wasim date: 10/15/01

If positive recommendation, immediately forward copies of this form and attached materials to the Provost and the Liberal Studies Office for consideration by the University-Wide Undergraduate Curriculum Committee. Dual-level courses also require review by Graduate Committee for graduate-level offering. Send information copies to 1) the college curriculum committee, 2) dean of the college, and 3) Dean of the School of Continuing Education.

**Step Three: UNIVERSITY-WIDE UNDERGRADUATE CURRICULUM COMMITTEE**

Positive recommendation  
 Negative recommendation

signature of committee chair: Gail S. Schust date: Oct. 30, 2001

Forward this form to the Provost within 24 calendar days after receipt by committee.

**Step Four: Provost**

Approved as distance education course  
 Rejected as distance education course

signature of Provost: [Signature] date: 11/1/01

**Step Five:**

Forward materials to Dean of the School of Continuing Education.

**1. Will a qualified instructor teach the course?**

Yes. Dr. Ramesh Soni and Dr. Nagendra both have experience with WebCT along with their expertise in the area of Production and Operations Management. The two instructors cumulatively have 20+ years of teaching experience and 100+ publications/conference presentations in the area of operations management. In addition, these two instructors provide corporate training in the area of computers to enhance organizational productivity.

**2. Will the technology serve as a suitable substitute for the traditional classroom?**

Yes. Along with using a textbook, the instructors will provide extensive material through WebCT to facilitate student learning. In addition, students will use course specific software (shrink-wrapped with the text) to enhance their learning experience.

**3. Are there suitable opportunities for interaction between the instructor(s) and students?**

Yes. Live chat room as well as threaded discussion will be utilized to stimulate discussion among instructor(s) and students. In addition, e-mail will be used for individual consultations.

**4 (a) Will there be suitable methods used to evaluate student achievements?**

Yes. In addition to the use of online quizzes and tests, student learning will be evaluated on their participation in discussions (threaded discussions, on-line chat, etc.); students will be required to submit several assignments as well.

**4 (b) Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty)?**

WebCT is a secure, password-protected environment. Additionally, the course requires so many different kinds of activities toward the final course grade that it will be quite difficult for students to engage in academic dishonesty.

**Prerequisites:** MATH 121<sup>1</sup>, MATH 214, Junior Status, ECOBIT

<b>Instructors:</b>	Ramesh G. Soni, Ph.D.	Prashanth B. Nagendra, Ph.D.
<b>Office:</b>	308-J ECB; 724-357-7787 (Tel);	304-A ECB; 724 357-4880 (Tel);
<b>E-mail:</b>	357-5743 (Fax) rgsoni@iup.edu	357-5743 (Fax) nagendra@iup.edu
<b>Office Hours:</b> If you need to contact me by telephone.	Mon: 8:00—9:10am; Wed: 8:00—9:10am; Fri: 8:00—9:10am; 11:30—1:00pm.	To be announced later.

**TEXT:** Davis, M. M, Aquilano, N.J., and Chase, Richard, Fundamental of Operations Management, 3<sup>rd</sup> Edition, Irwine McGraw-Hill. 1999.

**Catalog Description:** Study of the process of converting an organization's inputs into outputs whether in goods-producing or service industries. Provides an overview of concepts, tools, and techniques used in management of production and operations function in organizations.

**Course Objectives:** Students will learn what every manager should know about the management of production and operations in organizations. More specifically, after taking this course successfully, the student will be able to

- (1) Exhibit working knowledge of the theories and practices pertaining to management of operations needed to create goods/services efficiently and effectively.
- (2) Realize the importance of the interrelation between the production/operations management (POM) function and other functional areas including Marketing, MIS, Accounting, Design, etc.
- (3) Effectively address several strategic, design, and day-to-day issues involved in making a product or delivering a service.
- (4) Apply quantitative models of Operations Management to work situations.

**Teaching Method:** The distance education section will utilize WebCT for facilitating student learning. Students will be required to use POM software for several assignments. Students will be required to participate in course discussions in synchronous (live chat) as well as asynchronous (threaded discussion) modes. Quizzes and exams will be conducted on-line.

**Evaluation:**

Exams (4)	20% each
Assignments/quizzes (8-12 spread throughout)	15%
Online Participation	5%

**GRADE SCALE:** I usually stick to straight percentages (that is, 90% and up for A, 80% to 89.9% for B and so on). However, there may be a "scale slide" of unknown magnitude in your favor (to be determined only at the end of session).

**Do understand--**I don't give you a grade; rather, you **earn** a grade. I have nothing against a student as a person even if s/he earns a poor grade. I, strictly, maintain your record on my computer, and computer assigns grades at the end of semester. Grades will be available for review in WebCT through out the semester.

Exams will be cumulative. A comprehensive makeup examination (students find it to be very hard) will be scheduled toward the end of the semester; it can replace a maximum of one missed exam. Don't miss on-line exam timings for trivial reasons. If you must miss because of emergencies, I may provide a make up opportunity at a mutually convenient time within 10 calendar days of the original exam. However, those emergencies must be substantiated (examples of acceptable proof: Obituary Notice from a newspaper; record of doctor visit; etc.)

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<sup>1</sup> MATH 115, a new course developed for the business majors, will eventually replace MATH 121 as the prerequisite.

Exams will comprise of two parts: Part 1 will include a set of objective questions (emphasis will be on conceptual understanding rather than fact memorization); and Part 2 will include one or more of the following type of questions--numerical problems, short written answers, mini-cases, etc.

**QUIZZES & ASSIGNMENTS:** Generally, quizzes will be announced every week on WebCT. Unless told otherwise, each assignments that will be graded carefully on a scale of 10 points. Online submission of assignments must be done before 12:00mignight (EST) on the due date. Late assignments will not be accepted, unless prior arrangement has been made. Twenty percent of your assignment grade will depend on how systematic, clear, and thorough you are.

**Caution:** At times, it is possible that your answer to a homework problem may be inadvertently marked correct, probably due to an error on the part of my grader. You must not assume that your method or answer is correct unless you have verified it with the solution/key posted on WebCT.

### Course Outline

Topic	Chapt.	# of Week
Introduction & Operations Strategy (pages:1-39): Introduction to WebCT; POM software; e-mail and threaded-discussion netiquette. History and evolution; need and importance; relation to other business function; trends in operations (goods/services); competitive strategies.	1, 2	1
Product & Process Design and Analysis (pages: 42-75; 104-131): Concurrent engineering vs. Sequential design; modern trends in product/process design; product-focus vs. process-focus strategies; type of processes; linking processes with operations strategies.	3,4	1
Quality Management (pages: 133-168): Definitions; philosophies and teachings of quality experts; tools for quality management; ISO 9000; Quality awards	5	1
***** EXAM 1 *****		
Technology Planning and Management (Notes): CAD/CAM; Decision support technologies; robotics, NC machines; FMS and CIM; Justification of investments in technologies	Notes	1
Forecasting (pages: 196-235): Qualitative and quantitative techniques for forecasting; time series based models, causal-relation models, forecasting accuracy and technique selection	6	1
Supply Chain Management and Facility Location (pages:237-246; 380-395): Definition, complexities; information management for supply-chain; sourcing and procurement; location of facilities to enhance supply-chain function.	7, 11	1
Waiting Line Theory (pages: 290-305; notes): Modeling of waiting line; application of waiting line models for operation decision-making.	8	1
***** EXAM 2 *****		
Facility Layout (pages: 252-270): Principles and scope of layout: product, process and hybrid layouts	7	1
Capacity Planning and Aggregate Planning (pages: 246-251; notes): Defining and measuring capacity; capacity and commutative strategies—wait-and-see vs. expansionist's approach; bottleneck management.	7, 13 (parts)	1
Human Resource Issues, Job Design, Work Measurement (pages: 306-339; ignore numerical):	9 and 9S	1
***** EXAM 3 *****		

Project Management (pages:348-379, notes): AON/AOA modeling; PERT-CPM approaches; Critical activities; Contingency planning.	10	1
Inventory Models (pages: 460-469, 472-493): Need, concepts, applications, costs; ABC analysis; traditional models; concepts of lead time, safety stock, reorder point.	14	1
Material Requirements Planning (pages: 494-453; notes): Make-to-order, make-to-stock and assemble-to-order decisions; concepts and working of MRP; BOM, Master production schedule. Discussion of MRPII and Enterprise Resource Planning.	15	1
Just in Time Systems (pages: 396-429): Basic Elements if JIT, Advantage, scope, and limitations; Kanban.	12	1
***** EXAM 4 *****		

- Note:**
- 1) Assignment and practice problems will be assigned each week.
  - 2) Additional material will be posted or links to websites will be provided.

### BIBLIOGRAPHY (Brief)

W.C. Benton, and S. Hojung "Shin Manufacturing planning and control: the evolution of MRP and JIT integration" European Journal of Operational Research, Nov 1, 1998 v110 (3), p411-440.

Blackburn, J., ed., Time-Based Competition: The Next Battleground in American Manufacturing, Irwin, 1991.

Chew, W.B., Leonard-Barton, D. and R.E. Bohn. "Beating Murphy's Law." Sloan Management Review, July 1991.

Cole-Gomolski, Barb. "ERP! Excuse us as we digest our new system: Ripple effect can hurt customer service."

Computerworld, Sept 21, 1998, v32(38), p1.

Deming, W. Edward. Out of the Crisis. Cambridge, MA: M.I.T. Center for Advanced Engineering Study, 1986.

Davidow, W.H. and B. Uttal. "Service Companies: Focus or Falter," Harvard Business Review, July-Aug, 1989.

Dube, Laurette, Johnson, Michael D., and Renaghan, Leo Mark. "The QFD Approach to Extended Service Transactions," Production and Operations Management, Fall 1999 v8(3), p 301.

Fuller, F.T. "Eliminating Complexity from Work: Improving Productivity by Enhancing Quality," National Productivity Review, Autumn, 1985.

Goldratt, Eliyahu M., and Jeff Cox. The Goal: A Process of Ongoing Improvement. (2nd edition. Croton-on-Hudson, NY: North River Press, 1993.

Hayes, R.H. and G.P. Pisano. "Beyond World-Class: The Manufacturing Strategy," Harvard Business Review, January-February, 1994.

Landry, S., Duguay, Claude R., Chausse, S. and Jean-Luc Themens. "Integrating MRP, kanban and bar-coding systems to achieve JIT procurement." Production & Inventory Management Journal, Winter 1997, v38 (1), p8-12.

Lembrecht, M.R., and L. Decaluwe. "JIT and Constraint Theory; The issue of Bottleneck Management,"

Production and Inventory Management Journal, 3rd Quarter, 1988.

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Spedding, P. E. "Revisiting time-phased order points in the health care industry." IIE Solutions, Feb 1998, v30(2), p22-24.

Zinn, W. "Should You Assemble Products Before an Order is Received?" Business Horizons, March-April, 1990.

- 1) There will be absolute enforcement of every prerequisite requirement for the coursework offered by the Eberly College of Business and Information Technology. This means students cannot postpone prerequisites and take them after the course in question.**
- 2) The sequence of topical coverage as listed in syllabus may be altered.**

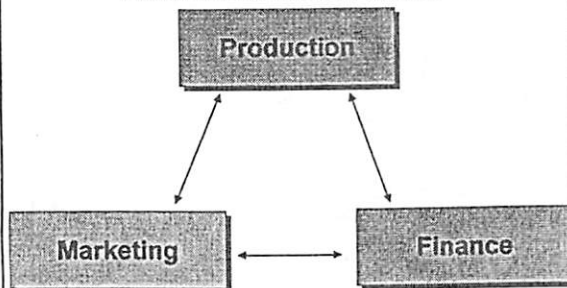
## Production and Operations Management

MGMT 330  
Dr. Ramesh G. Soni  
Spring 2007

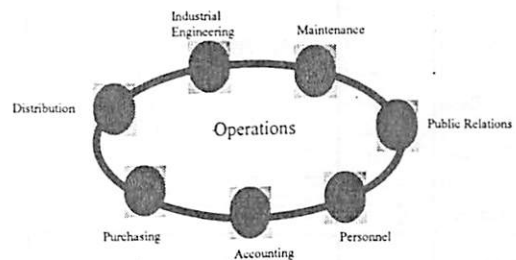
## The Three Most Important Functional Areas

- Finance
- Operations
- Marketing
- Other Functional Areas are important, but they are considered as support functions: MIS, Human Resource, Accounting, Engineering

### Production as a Basic Function



### Operations Interfaces



### What has been happening:

- In the recent past, U.S. Managers have ignored operations
  - Before the 1950s--Operations Focus
  - In the 1960s--Marketing Focus
    - Marketing Strategies==> Corporate Strategies
  - In the 1980s--Finance Focus
- However, the global competition is forcing us to re-evaluate our priorities.

### A new understanding

- All three functional areas are equally important.
- Fortune cannot be made without hard work.
- Renewed interest in the Operations function.



### Some Historical Events in P/OM

- Industrial Revolution
- Scientific Management
- Human Relations Era
- Management Science
- Quality Revolution

### Operations Strategy

- Competing on Cost
- Competing on Quality
  - High performance design
  - Consistent quality
- Competing on Flexibility
  - Customization
  - Volume/product-mix Flexibility
- Competing on Time
  - Fast delivery
  - On time delivery
  - Development speed
- Dependability

### Types of Operations

Operations	Examples
Goods Producing	Farming, mining, construction, manufacturing, power generation
Storage/Transportation	Warehousing, trucking, mail service, moving, taxis, buses, hotels, airlines
Exchange	Retailing, wholesaling, banking, renting, leasing, library, loans
Entertainment	Films, radio and television, concerts, recording
Communication	Newspapers, radio and television newscasts, telephone, satellites

### Manufacturing vs. Service

Characteristics	Mfg	Service
Output	Tangible	Intangible
Customer Contact	Low	High
Uniformity of Input	High	Low
Uniformity of Output	High	Low
Measurement of Productivity	Easy	Difficult
Labor Content	Low	High
Opportunity to correct problem before delivery to customer	High	Low
Proximity to customer	No need	needed

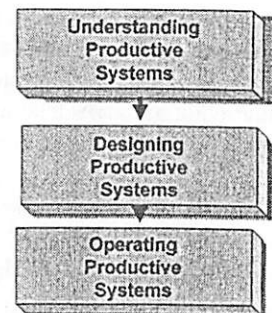
*These differences are beginning to fade in many cases*

### Recent Trends In Business

(In general)

- Global competition
- Operations strategy
- Total quality management (TQM)
- Flexibility
- Time reduction
- Technology
- Worker involvement
- Reengineering (fundamental rethinking and redesigning)
- Service
- Environment, Ethical, and Workforce Diversity

### Organization of the Course





## Activity List for Distance Education Class (MGMT 330)

### Chapter (Introduction):

- 1) Find at least two sources to confirm that the three core functions in any business organization are: \_\_\_ (Library or Internet Sources)
- 2) Track the labor productivity growth rate for the US over the last 50 years (Federal Government web site searches should result the info); compare that to that for Italy and China?
  - a. <http://mwhodges.home.att.net/product.htm>
  - b. US Department of Labor. <http://www.bls.gov/blshome.htm>
- 3) Differences in what is traditionally considered “manufacturing” and “service” are disappearing. Support the statement through several examples.

# Regular Section!

## MGMT 330 Production and Operations Management (3 credits)

Fall 2001

**Prerequisites:** MATH 214; MATH 121, junior status, ECOBIT

<b>Instructor:</b>	Ramesh G. Soni, Ph.D.
<b>Office:</b>	308-J ECB; 357-7787 (Tel), 357-5743 (Fax)
<b>E-mail:</b>	rgsoni@iup.edu
<b>Office Hours:</b>	Mon: 8:10—9:10am; 11:30—12:00 noon; Wed: 8:10—9:10am; 11:30—1:00pm; Fri: 8:10—9:10am

**TEXT:** Davis, M. M, Aquilano, N.J., and Chase, Richard, Fundamental of Operations Management, 3<sup>rd</sup> Edition, Irwine McGraw-Hill. 1999. (If you wish and if you can, you may share a book with a classmate. Of course, it may require some careful scheduling.)

**NOTES:** Supplemental Package at Pro-Packet

**Catalog Description:** Study of the process of converting an organization's inputs into outputs whether in goods-producing or service industries. Provides an overview of concepts, tools, and techniques used in management of production and operations function in organizations.

**Course Objectives:** After taking this course successfully, the student will be able to

- (1) Understand that money cannot be made without hard work. Thus, they will learn to manage production of goods/services efficiently and effectively.
- (2) Realize the importance of the interrelation between the production/operations management (POM) function and other functional areas including Marketing, MIS, Accounting, Design, etc.
- (3) Correlate classroom experience in the course with current practices in Operations management. Students will be encouraged--in some instances required--to read current periodicals such as Fortune, The Wall Street Journal, Business Week, or Internet resources.
- (4) Apply quantitative models of Operations Management to work situations.

**Teaching Method:** Marker board/ computer projection /overhead will be the main media of classroom communication. Students are encouraged to interact in classroom, and will be required to participate during in-class group activities. Video (Plant tours) presentations will supplement the lectures. Students will be required to use computer laboratory for assignments. Students may be required to use WebCT (a web-based course tool) for taking on-line quizzes and for on-line discussion and assignment.

**Evaluation:**

Exams (4)	18% each
Homework/quizzes (8-12 spread throughout)	20%
Class Participation/Group Activities	8%

**GRADE SCALE:** I usually stick to straight percentages (that is, 90% and up for A, 80% to 89.9% for B and so on). However, there may be a "scale slide" of unknown magnitude in your favor (to be determined only at the end of session).

**Do understand--**I don't give you a grade; rather, you **earn** a grade. I have nothing against a student as a person even if s/he earns a poor grade. I, strictly, maintain your record on my computer, and computer assigns grades at the end of semester. I advise you to review any anomaly in my records by visiting with me during office hours anytime during the semester.

Exams will be cumulative. A comprehensive makeup examination (students find it to be very hard) will be scheduled toward the end of the semester; it can replace a maximum of one missed exam. Don't miss exams for trivial reasons. If you must miss because of emergencies, I may provide a make up opportunity at a mutually convenient time with 10 days of the original exam. However, those emergencies must be substantiated (examples of acceptable proof: Obituary Notice from a newspaper; record of doctor visit; etc.)

**EXAM INSTRUCTION:** Students will be allowed to bring a 3" X 5" hand-written card (for formulas or any other information). No photocopies will be allowed. You will not be allowed to bring to exams any thing other than the following items: writing material, a calculator, a ruler, a 3X5 hand-written note card, a wallet or a purse or a handbag no larger than 6"X6"X2" (other items such as books, notebooks, etc. must be kept outside the exam room).

Exams will comprise of two parts: Part 1 will include a set of objective questions (emphasis on conceptual understanding rather than fact memorization); and Part 2 will include one or more of the following type of questions--numerical problems, short written answers, mini-cases, etc.

**QUIZZES & HOMEWORK:** Generally, quizzes will be announced 1 to 2 classes in advance. However, students can expect occasional pop quizzes. No makeup opportunity will be provided for missed quizzes or homework. However, if a student misses 3 or more quizzes/ homework because of a medical reason (must substantiate), makeup can be arranged.

Unless told otherwise, each homework that will be graded carefully on a scale of 10 points. Homework must be always submitted on the day it is due in classroom; don't slip it under my office door or leave it in my mailbox. Late submission will result in one lower grade penalty per unexcused class session. If you cannot attend class, give the homework to the department secretary and ask her to stamp time and date.

- NOTE:**
- (1) 20% of your homework grade will depend on how systematic, neat, and thorough you are.
  - (2) Always start new question on a new side. If you have more than one sheet, you must fasten them with staple or clip.
  - (3) I will not accept homework submitted on sheets with uneven edge (torn from your spiral notebook).
  - (4) You must use standard, white sheets (8 1/2" x 11").

**Class participation** is extremely important--of course, the necessary but not sufficient condition for scoring high grade on class participation is to attend classes regularly. It is strongly recommended that students read general business news (Business Week, The Wall Street Journal, Fortune, etc.) and relate them to topics covered in class. Don't come up with excuses such as, you don't have time to do general reading (how about cutting down on watching MTV?). I will maintain **attendance record** and a portion (up to 4% of final grade) of class **participation grade** may be based on attendance. You can have up to an equivalent of 3 class-hours of excused absences without hurting your participation points.

Ways to earn positive (+) points for Participation:

- (1) Constructive discussions.
- (2) Clarification of doubts.
- (3) Relate class discussions to your work/reading or other experiences.
- (4) Answering questions.
- (5) Professional behavior.

Ways to earn negative (-) points for participation:

- (1) Coming late to class regularly.
- (2) Exchanging written comments to your neighbors and laughing/smiling. If you have a joke, share it with all of us as long as it's in good taste.
- (3) Sleeping in class: When you work/party all night, it would be better if you don't come to class the following morning.
- (4) Don't make insincere comments/arguments.
- (5) Any kind of disruptive behavior.
- (6) Coming to class unprepared. If you miss a class, find out what you missed and make an attempt to understand the material (first from a friend and then by visiting me, when possible).

Tips for Success:

- (1) Attending lectures is extremely important. If you miss lectures, copy any missed notes from a friend promptly. Also, find out if any work was assigned the day you missed a class. Don't e-mail to me asking: "What did I miss yesterday?" I cannot possibly type out the entire lecture for every one who sends me such an e-mail...as you can understand.
- (2) Don't be under the impression that since you have the notes, you don't need to attend classes anymore. The notes are not complete!!!
- (3) Practice recommended problems; submit assignments on time.
- (4) I will be communicating with you via E-mail (announcements, assignment, answer to homework problems, etc.). Make sure that you check your IUP e-mail regularly (You can check your IUP e-mail at: [www.iup.edu/email](http://www.iup.edu/email) or you can forward your e-mail by typing the following at the mail prompt on the VMS: SET FORWARD "IN%""your@email.address"")

**Caution:** At times, it is possible that your answer to a homework problem may be inadvertently marked correct, probably due to an error on the part of my grader. You must not assume that your method or answer is correct unless you have verified it with the solution/key kept on reserve in the library (or my web page), or if the problem has been discussed in class.

**Course Outline**

Topic	Chapt.	# of Hours
Introduction & Operations Strategy (pages:1-39): History and evolution; need and importance; relation to other business function; trends in operations (goods/services); competitive strategies.	1, 2	3
Product & Process Design and Analysis (pages: 42-75; 104-131): Concurrent engineering vs. Sequential design; modern trends in product/process design; product-focus vs. process-focus strategies; type of processes; linking processes with operations strategies.	3,4	3
Quality Management (pages: 133-168): Definitions; philosophies and teachings of quality experts; tools for quality management; ISO 9000; Quality awards	5	3
***** EXAM 1 *****		
Technology Planning and Management (Notes): CAD/CAM; Decision support technologies; robotics, NC machines; FMS and CIM; Justification of investments in technologies	Notes	2
Forecasting (pages: 196-235): Qualitative and quantitative techniques for forecasting; time series based models, causal-relation models, forecasting accuracy and technique selection	6	3
Supply Chain Management and Facility Location (pages:237-246; 380-395): Definition, complexities; information management for supply-chain; sourcing and procurement; location of facilities to enhance supply-chain function.	7, 11	2
Waiting Line Theory (pages: 290-305; notes): Modeling of waiting line; application of waiting line models for operation decision-making.	8	3
***** EXAM 2 *****		
Facility Layout (pages: 252-270): Principles and scope of layout: product, process and hybrid layouts	7	3
Capacity Planning and Aggregate Planning (pages: 246-251; notes): Defining and measuring capacity; capacity and commutative strategies—wait-and-see vs. expansionist's approach; bottleneck management.	7, 13 (parts)	2 1/2

Human Resource Issues, Job Design, Work Measurement (pages: 306-339; ignore numerical):	9 and 9S	2 -1/2
***** EXAM 3 *****		
Project Management (pages:348-379, notes): AON/AOA modeling; PERT-CPM approaches; Critical activities; Contingency planning.	10	2
Inventory Models (pages: 460-469, 472-493): Need, concepts, applications, costs; ABC analysis; traditional models; concepts of lead time, safety stock, reorder point.	14	3
Material Requirements Planning (pages: 494-453; notes): Make-to-order, make-to-stock and assemble-to-order decisions; concepts and working of MRP; BOM, Master production schedule. Discussion of MRPII and Enterprise Resource Planning.	15	3
Just in Time Systems (pages: 396-429): Basic Elements if JIT, Advantage, scope, and limitations; Kanban.	12	3
***** EXAM 4 *****		

- Note:**
- 1) Homework and practice problems will be assigned after discussing each topic.
  - 2) Additional material on reserve (or handout will be distributed).

### BIBLIOGRAPHY (Brief)

W.C. Benton, and S. Hojung "Shin Manufacturing planning and control: the evolution of MRP and JIT integration" European Journal of Operational Research, Nov 1, 1998 v110 (3), p411-440.

Blackburn, J., ed., Time-Based Competition: The Next Battleground in American Manufacturing, Irwin, 1991.

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Zinn, W. "Should You Assemble Products Before an Order is Received?" Business Horizons, March-April, 1990.

- 1) There will be absolute enforcement of every prerequisite requirement for the coursework offered by the Eberly College of Business and Information Technology. This means students cannot postpone prerequisites and take them after the course in question.**
- 2) The sequence of topical coverage as listed in syllabus may be altered.**

### Make Friends

Name of Friends		E-mail	Phone	Other Info
First Name	Last name			

(2)

# Budget Approval Form

(Each semester a distance education course is offered, prior budget approval of the sponsoring dean is required.)

## Distance Education Course

Course and Section: MGMT 330 for Semester: Spring Year: 2002

Instructor of Record: Soni/Nagendra phone: 7-7786/7-4880 e-mail: rgsoni/nagendra

     **Initial scheduling as a distance education course**

Check all that apply:

Base compensation:  on-load     overload     Article 27

Other required payments:  preparation compensation     remote site fee(s)  
 remote site student fee(s)     travel reimbursement and Article 40 stipend

Other costs:     video transmission     marketing

OR

     **Subsequent scheduling as a distance education course**

Check all that apply:

Base compensation:  on-load     overload     Article 27

Other required payments:  course revision compensation (three years after course initially taught)

remote site fee(s)     remote site student fee(s)

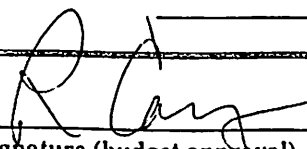
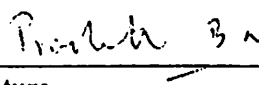
travel reimbursement and Article 40 stipend

     **Budget Approval**

Funds are available in my college to subsidize the above costs for this course.

Enrollment of      is required to cover the costs of this course.

Other \_\_\_\_\_

Dean:  10/17/01 Faculty member:  10/17/01  
signature (budget approval)    date    signature    date

For the initial scheduling, attach this signed form to the Review/Approval Form.  
For subsequent scheduling, send signed form to the Dean of the School of Continuing Education, who will advise the Registrar to add the course to the schedule.