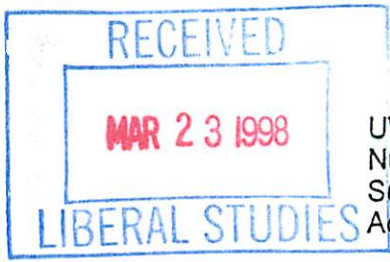


LSC Use Only
 Number: _____
 Submission Date: _____
 Action-Date: _____



UWUCC USE Only
 Number: 99-8
 Submission Date: 98-15
 Action-Date: 97-63
 App 3/14/00
 Senate App 5/2/00

CURRICULUM PROPOSAL COVER SHEET
 University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Dr. Prashanth Nagendra Phone 4880
 Department Dept. of Management

II. PROPOSAL TYPE (Check All Appropriate Lines)

- COURSE** Sem. Operations Mgt.
Suggested 20 character title
- New Course*** MG 438 Seminar In Operations Management
Course Number and Full Title
- Course Revision** _____
Course Number and Full Title
- Liberal Studies Approval +** _____
for new or existing course Course Number and Full Title
- Course Deletion** _____
Course Number and Full Title
- Number and/or Title Change** _____
Old Number and/or Full Old Title

New Number and/or Full New Title
- Course or Catalog Description Change** _____
Course Number and Full Title
- PROGRAM:** _____ Major _____ Minor _____ Track
- New Program*** _____
Program Name
- Program Revision*** _____
Program Name
- Program Deletion*** _____
Program Name
- Title Change** _____
Old Program Name

New Program Name



III. Approvals (signatures and date)

Paul Anderson 3/28/96 Department Curriculum Committee
Bob [Signature] Department Chair
Vijay [Signature] 4/3/97 College Curriculum Committee
Robert [Signature] 3/10/98 College Dean
[Signature] 3/25/98
 +Director of Liberal Studies (where applicable) *Provost (where applicable)

**SUPPLEMENTAL DEPARTMENT STATEMENT FOR WRITING INTENSIVE
COURSE TYPE II**

The Chairperson of the Department of Management will have the responsibility to assure that the MG 438-W course will be taught only by qualified instructors and only in accordance with the guidelines put forth in the accompanying proposal. This responsibility will be carried out jointly by the Chairperson and the faculty in the department who teach, or who are potentially qualified to teach, this course. Because of the interactive nature of the course assignment & scheduling process within this department, no departure from the intent of the requirements is anticipated.

The cognizant members of the Department of Management are aware of the requirements for writing intensive courses and intend to comply.

Writing Summary--MG 438 Seminar in Operations Management

This is a new course proposal for MG 438 Seminar in Operations Management. If approved, it will replace the existing MG 428 Seminar in Management (writing-intensive- Type II) only for students in the Industrial (Operations) Management concentration in the Department of Management. The major difference between the new seminar course (MG 438) and the existing seminar course (MG 428) is in the topics covered in the courses. MG 438 is more specific and emphasizes the topics in operations management while MG 428 is more general and focuses on all aspects of management including operations, human resources, entrepreneurship, strategy, and international management. The 'writing-intensive' emphases of the two courses are similar since the types of writing assignments may be identical for the two courses.

The course will be offered once in two semesters. Most of the students are expected to be from the Management Department. However, students from other departments in the Eberly College of Business and Safety Sciences will meet the prerequisites for the course and will be eligible to enroll. Because of the prerequisites, all students in this course are expected to be seniors. The class size will be limited to 22 students.

There are currently three faculty members within the Management Department who are eligible to teach this course. Two of them have been teaching the existing seminar course (MG 428) for at least five years. In spite of the possible differences in each faculty member's priorities and criteria in teaching the course, the following criteria will remain common to this course:

1. at least one of the written assignments will be of the submit/revise/resubmit variety.
2. a minimum of 50% of the final grade will be based upon writing assignments.
3. the evaluated writing assignments for each student will amount to at least 5000 words (about 15 to 20 pages).

The following pages describe the different types of writing that will be assigned to students as part of this course. Examples of each type of assignment and details of evaluation are also presented.

Types of writing assignments that will be used with sample assignments

Writing Assignment Type 1 Case Analyses (15% of final grade)

This type of writing assignment will require the students to critically analyze and evaluate a given business situation and describe an action plan based on the theories and practices discussed in the class. Emphasis will be placed upon insightful analysis and evaluation, theoretical foundation, practical feasibility of the action plan and **clarity and professionalism of the report**. The report will be 2-3 pages in length. Each student will work on one individual case and possibly on more group cases.

Sample assignment of a case study

(Single copy of the actual case is enclosed for LSC members)

Read the Case, “Federal Express--The Cost of Poor Quality” and critically analyze the philosophy, strategy, and processes employed by the company in their quest to win the coveted Malcolm Baldrige National Quality Award (MBNQA). Your analyses should be presented in 2-3 typed pages and should include the following:

- a) The company’s historical perspective on ‘quality’ and its strategic importance.
- b) The impact of (i) leadership and (ii) customer focus on quality improvement.
- c) The use of MBNQA criteria by Federal Express in becoming a world leader in their business.
- e) Anything that you would do differently to achieve what this company did.
- d) The lessons that you learned from this case study that you could apply to your current or future company.

The grade for this assignment will be based upon the

- (i) organization of the report; grammar, spelling, vocabulary and professionalism of the report (assume that you are writing this for your employer/boss!)
- (ii) critical insights that you can provide from this case study based on our classroom discussions on quality management.
- (iii) feasibility of suggestions that you can provide for the company in the case as well as to your current/future employer.

Writing Assignment Type 2 Term paper (25% of grade)

This type of writing requires students to assimilate their theoretical knowledge on a particular topic in the course and integrate it with relevant current research and industry practices. Students will be required to read and synthesize several journal and magazine articles on the selected topic and compile a comprehensive term paper of 8-10 pages. Emphasis will be placed upon quality and relevancy of independent research, information synthesis, and the **professionalism, organization and clarity of presentation of the paper**.

Sample Research Paper assignment:

Topic: Each student will select a relevant topic, get it approved by the instructor and compile a 8-10 page research paper that will be due at the end of the semester. Example topics--(1) The applicability of Just-in-time practices to the U.S. auto industry. (2) The use of 'Focus Forecasting' to forecast demand for distribution centers. (3) Developing selection criteria for job-shop manufacturers in their effort to procure a Manufacturing Resources Planning (MRP-II) software.

Objective: The paper must synthesize the class discussions, current research, and industry practices in that specific topic. The students will be able to obtain in-depth knowledge in their selected topic, synthesize the information and present their findings and analyses in a professionally written report.

Time-line: Each student must select a topic and get it approved by the instructor within the first two weeks. A one-two paragraph abstract of the topic and the focus of the research paper will be due in the fourth week of the semester. The instructor will provide feedback within one week. The first draft of the complete paper will be due two weeks before the last day of classes and the final report will be due on the last day of the semester. **You are encouraged to meet with the instructor as frequently as required to make sure that you are going in the right direction in terms of both your research and format of the report.**

Paper Format: The length of the paper must be around 8-10 pages excluding the abstract, tables, figures, appendices and bibliography. Students must have a strong reason to have a shorter length paper while longer papers are welcome. Please refer to the papers in the following journals to design the organization and format for your paper. As explained in the evaluation criteria, professionalism in the paper is weighed heavily.

Research requirement: Each paper must cite at least ten relevant journal publications from at least three different journals. Examples of journals in the area include:

APICS--The Performance Advantage	Academy of Management Executive
The Academy of Management Journal	Academy of Management Review
California Management Review	Decision Sciences
European Journal of Operations Research	Harvard Business Review
Industrial Engineering	IIE Transactions
Intl. J. of Operations & Prodn. Mgmt.	Intl. Journal of Production Economics
Intl. Journal of Production Research	Interfaces
Journal of Business	Journal of Mfg. and Operations Management
Journal of Manufacturing Systems	Journal of Operations Management
Journal of Quality and Participation	Journal of Quality Technology
Management Science	Material Flow Journal
Omega	Production and Inventory Management
Quality Progress	Sloan Management Review

Evaluation Criteria: The papers will be graded based on the professionalism, organization and clarity of presentation. Emphasis must be given to acceptable grammar, vocabulary, sentence construction, and spelling. Quality of the literature review, its synthesis, and subsequent original contribution will be weighed heavily.

Writing Assignment Type 3 Journal article (15% of grade)

Each student will be required to read two related journal articles, summarize the salient points of the articles in one page each and subsequently share them with the rest of the class. This will be a **submit/revise/resubmit** type of assignment and the final copy will be distributed to each student in the class during the time of informal presentation.

Sample Assignment

(Single copy of the actual journal paper is enclosed to be passed among LSC members)

Read the article "Integrating ISO 9001 and ISO 14001," by Bechner and Koch in the February 1997 issue of Quality Progress. Clearly summarize the important points in the article in one page and submit it to me in one week. Remember that your summary will be copied and distributed to all students in the class. Upon reading your summary, they should get a good understanding of the entire journal article. After you receive my comments, make changes (if required) to the report and distribute a copy to each student in the class. A week after that, you will discuss the paper with the class in 5 minutes and answer our questions on that paper. Majority of your grade will be based on your written report although your ability to answer class questions will also be used to assign the grade.

Writing Assignment Type 4 Chapter Synopsis and Analysis (Not graded)

At the end of each topic, students will be required to summarize and discuss the relative strengths and drawbacks of different techniques. For example, Materials Requirement Planning (MRP) and Just-in-time (JIT) are two popular production scheduling techniques in practice. In addition to summarizing the class discussions on the relative merits of these two techniques, students should discuss their applicability to different scenarios.

Writing Assignment Type 5 Report on Field Trips (10% of Grade)

This course involves field trips to at least four different manufacturing and retail businesses in and around Indiana county to observe tools and techniques in operations management, being used in practice. After the completion of each of these trips, students will be required to summarize their findings during the visit in 3 pages. This summary will include answers to the instructor's questions on related topics. This will be a **submit/revise/resubmit** type of writing assignment.

Sample Assignment: (I have visited this company several times since we helped this company through the Eberly College of Business Small Business Institute program).

Next week, we will be meeting with the Operations Manager of Clark Metal Products (CMP) in Blairsville, PA. We will spend the first 10 minutes of our 60-minute trip getting an overview of the company following which we will be taken on a 30 minute trip of their manufacturing facility. Feel free to ask questions during the plant tour. Also after the tour, we will have 20 minutes to spend with the Operations Manager (and possibly the President of the company) discussing any topic related to the visit and to the subject. We can further discuss our visit in the subsequent class.

You will be required to compile a two-page professional report on our visit. In addition to summarizing what we saw and learned during the trip, I want you to answer the following questions pertaining to our class discussions:

- 1) What are the features of the CMP's business that will allow you to classify it as a job-shop?
- 2) Do you think Materials Requirement Planning (MRP) would work well for this company? Why/ why not?
- 3) What are the facility layout strategies that CMP has employed? Do you have any suggestions for them?
- 4) Do you think computerizing their production schedule would increase their productivity? Why/why not?

Writing Assignment Type 6 Tests (30% of final grade)

Both the mid-term and final exams are going to be comprised mainly of short-essay questions. In addition to the accuracy of the answers, emphasis will be placed upon clarity, grammar, and writing style.

Syllabus of Record

I. Catalog Description

MG 438 /W/ Seminar in Operations Management

3c-01-3sh

Prerequisites: MG 330, senior standing

An integrative course in operations management. Considers and analyzes the current literature and contemporary topics in the area of providing service and producing goods. Case studies and field trips are used to provide students with a comprehensive knowledge of the theories, current practices and trends in several topical areas of operations management. Students will learn to present their findings and analyses in a professionally written format.

II. Course Objectives

Upon completion of this course, the students will:

- (i) have a thorough understanding of current practices in operations management in both manufacturing and service sectors of business.
- (ii) obtain in-depth knowledge of the current literature and be able to comprehend, analyze and report several recent trends, philosophies and techniques in operations management. Students, after consulting with the instructor, will select a pertinent topic, conduct research, and submit a term paper at the end of the semester. Also each student will be required to read two journal/magazine articles, submit a written summary of the article and present the paper in class.
- (iii) acquire a good understanding of the nature of interaction between operations and other business functions in a practical setting. The class involves field trips to at least four manufacturing and retail businesses in the Indiana area. After each visit, students will be compiling a written report that summarizes their findings during the visit, in addition to answering the instructor's specific questions about operations management and other functions in that business.
- (iv) be able to use the operations function as a strategic tool to gain competitiveness in different types of organizations. Students will read and analyze comprehensive case studies and provide written recommendations in the form of a professional report that can be utilized by top management for formulating corporate strategy.
- (v) The writing-intensive nature of this course will prepare students to present their findings and analyses in a professionally accepted written format. This will enhance their ability to successfully obtain and disseminate information in their professional careers.

III. Detailed Course Outline:

A. Strategic decisions in Operations Management (2 hours)

- The role of the operations function in attaining and maintaining a company's and a country's competitiveness.
- Case studies of several retail, service, and manufacturing (large and small) companies that have been using the operations function as a strategic tool.

B. Inventory distribution in retail, service and manufacturing industries (3 hours)

- Global Sourcing.
- Supply Chain Management.
- Other recent trends.
- International Distribution.
- Perpetual Inventory Systems.

Cases in fast food industry, discount store, grocery store, and manufacturing.

C. Materials Management and Purchasing (3 hours)

- Impact of inventory on profitability.
- Cost implications on operations related issues of inventory.
- Distinction between traditional and current inventory management practices.
- Purchasing practices in discount merchandising.
- The role of buyers and purchasers.

D. Practical issues in MRP (3 hours)

- Hybrid MRP / JIT systems.
- Selection methodology for a MRP software.
- Distribution Requirements Planning in practice.
- Finite Capacity Planning.
- Shop floor control capability in MRP software.
- Dynamic estimation of lead time and lot size.

E. Operations Scheduling (2 hours)

- Theory of Constraints and Optimized Production Technology.
- Selection methodology for a shop floor control software.

F. Facility Layout (2 hours)

- Designing a Cellular Layout using Group Technology.
- Considerations in designing a factory layout and a retail layout.

G. Implementation issues in Just-in-time (JIT) (3 hours)

- Favorable environments for JIT.
- Prerequisites for JIT implementation.
- JIT and Kanbans in service environments.
- Case studies.

H. The use of waiting line models and simulation in operations management (2 hours)

- Manufacturing and service industry applications.
- Use of AUTOMOD simulation software for analysis.

I. State-of-the-art Manufacturing and Operations Technology (3 hours)

Utilization of Computerized Numerically Controlled Machines, Flexible Manufacturing Systems, Industrial Robots, Computer Integrated Manufacturing, Automated Storage and Retrieval Systems, Automated Guided Vehicles and other emerging technologies in practice. The role of these technological advances in achieving manufacturing flexibility.

J. Design and Manufacturing (2 hours)

Design for Manufacturability, Concurrent Engineering, House of Quality. Cases and discussions.

K. Recent trends, concepts, tools and philosophies (4 hours)

Operations management has witnessed several new trends and tools over the last two decades. Students will be exposed to the latest trends at the time of course offering. Some examples of current concepts and trends are paperless manufacturing, lightless plants, zero-defect service and manufacturing, zero inventory, negative inventory turns, synchronized manufacturing and enterprise resource planning.

Field trips to manufacturing, retail and service businesses in and around Indiana County to observe some of the above concepts, tools and philosophies. **(9 hours)**

Midterm, final exam, and class presentations (1+2+3 hours=6 hours)

IV. Evaluation Methods:

(Additional details are enclosed in the Writing-Intensive section of the proposal)

The final grade for the course will be determined as follows:

25% Individual research paper

Students can select from a set of instructor-approved current topics. Each student is required to prepare a 8-10 page research paper on the topic. The paper must integrate the classroom discussions, current industry practices and research in the selected topic. While grading, emphasis will be placed on quality and relevancy of independent research, information synthesis, and the professionalism, organization & clarity of presentation of the written report.

15% Journal articles

Each student will be required to read two related journal articles, summarize the salient points of the articles in one page each and subsequently share them with the rest of the class in an informal five-minute presentation. The grade will be mainly based on the written part of the assignment.

15% Case analysis

Case studies will be assigned to students, either individually or in groups based on the complexity of the case. The students will be required to critically analyze and evaluate the business situation and summarize their action plan in a 2-3 page report. Emphasis will be placed on insightful analysis and evaluation, theoretical foundation, practical feasibility of action plan and clarity of presentation.

10% Field trip reports

Several field trips to different manufacturing and retail businesses in and around Indiana County are planned during the semester to observe some of the operations tools and techniques being used in practice. After the completion of each of these trips, students will be required to summarize their findings during the visit in 2 pages. This summary will also include answers to the instructor's questions on related topics.

30% Tests.

Two tests with equal weight. The tests will comprise of mainly short essay questions. In addition to the accuracy of the answers, emphasis will be placed upon clarity, grammar, and writing style.

5% Class participation

Student participation and involvement is an integral part of several activities in this seminar course. Although most of the assignments are designed to elicit active student participation, this 5% of the grade will be based on the student's voluntary participation in class discussions.

Final Grades will be determined as follows:

A	90 % and above	B	80 - 89 %
C	70 - 79%	D	60 - 69 %
F	< 60 %		

V. Required textbooks and readings:

As in many seminar courses, there is no text book for this course. Copies of the cases and papers required for the course will be available at Kinko's and/or Copies Now. Several text books, journals and magazines that are available in the IUP library (partial list in Bibliography) can be used as recommended and supplemental readings.

VI. Special resource requirements

None.

VII. Bibliography

"APICS - The Performance Advantage," American Production and Inventory Control Society Inc., Falls Church, VA, 2000.

Chase, R.B., Aquilano, N.J. and Jacobs, F.R., *"Production & Operations Management – Manufacturing and Services,"* Irwin, McGraw-Hill, 2000.

Colley, J.C. Jr., *"Case Studies in Service Operations,"* Duxbury, 1996.

Evans, J.R. *"Production/Operations Management – Quality, Performance & Value,"* West Publishing Co., 1997.

Finch, B.J. and Luebbe, R.L., *"Competing in a Changing Environment,"* Dryden Press, 1995.

Goldratt, E. and Fox. B., *"The Race,"* North River Press, Inc., 1986.

Goldratt, E. and Fox, B., "*The Goal*," North River Press, Inc., 1986.

Heizer, J. and Render, B., "*Production & Operations Management – Strategic & Tactical Decisions*," Prentice Hall, 1996.

"*Industrial Engineering*," Journal published by the Institute of Industrial Engineers, Norcross, GA, 2000.

"*Journal of Manufacturing Systems*," Society of Manufacturing Engineers, Dearborn, MI, 2000.

Krajewski, L.J. and Ritzman, L.P., "*Operations Management - Strategy and Analysis*," Addison, Wesley, 2000.

"*Management Science*," Journal Published by INFORMS, Atlanta, GA, 2000.

Martinich, J.S. "*Production & Operations Management – An Applied Modern Approach*," Wiley, 1997.

Markland, R.E., Vickery, S.K. and Davis, R.A., "*Operations Management – Concepts in Manufacturing & Services*," West Publishing, 1995.

"*OR/MS Today*," Journal published by INFORMS, Atlanta. GA, 2000.

"*Production and Operations Management*," An International Journal of the Production and Operations Management Society, Baltimore, MD, 2000.

"*Production Planning and Control*," Journal published by Taylor & Francis, NY, 2000.

"*Production and Inventory Management*," Journal published by APICS, Falls Church, VA, 2000.

"*Quality Progress*," Journal published by ASQ, Milwaukee, WI, 2000.

Sipper, D. and Bulfin, R.L. Jr., "*Production: Planning, Control & Integration*," McGraw-Hill, 1997.

Sower, V.E., Motwani, J. and Savoie, M.J., "*Classic readings in Operations Management*," The Dryden Press, 1995.

Starr, M.K., "*Operations Management – A Systems Approach*," Boyd & Fraser, 1996.

Stevenson, W.J., "*Production/Operations Management*," Richard D. Irwin, 1996.

A. Details of the Course

- A1 This course will replace Seminar in Management (MG 428) as a required course for students in the Operations (Industrial) Management track.
- A2 A separate curriculum-change proposal for the Operations (Industrial) management track is attached. The addition of this course is one of the changes being proposed to the Operations (Industrial) management track.
- A3 This course has not been offered at IUP on a trial basis.
- A4 This course is not intended to be dual level.
- A5 This course is not to be taken for variable credit.
- A6 Similar courses are offered at these institutions:

University of Iowa:	Research Seminar in Operations Management
Clemson University:	Selected Topics in Industrial Management
Iowa State University:	Special Topics in Operations Management

(‘Special Topics’ and ‘Selected Topics’ are not generic terms in the above universities).

- A7 The very nature of the seminar course is to integrate and assimilate the knowledge base of the students in their area of concentration. This course builds on the knowledge gained by students in the other operations management courses. It provides them with a good understanding of the current practices and prepares them to confidently pursue a career in operations management. The main objectives of other courses in operations management are to introduce and familiarize students with several topics in the area.

B. Interdisciplinary Implications

- B1 This course will not be team taught.
- B2 This course will not overlap with any other course at the University.
- B3 Seats will be made available for students in the School of Continuing Education if they meet the prerequisites for the course.

C. Implementation

- C1 This course will be offered once every two semesters. There are at least three faculty members in the department who can teach this course.

C2 The available space is sufficient for this course.

No additional equipment is required for this course. About 6 hours of computer lab time will be required per semester. It can be easily scheduled in one of the Eberly College of Business labs.

No laboratory supplies and other consumable goods are required for this course.

Library materials are adequate for this course.

No travel funds are required for this course.

C3 No grant funds are associated with this course.

C4 This course will be offered once every two semesters.

C5 One section of the course will be offered at a time.

C6 Twenty two students will be accommodated in this course. Due to the highly participative nature of the course and the several site visits involved, a larger class size is not recommended.

C7 No professional society recommends enrollment limits for this course.

D. Miscellaneous

No additional information is necessary.