The University Of Toledo

Existing Graduate Course Modification Form

* denotes required fields

Contact Person*: P. S. Sundararaghavan Phone: 530-2456 (xxx - xxxx) Email: p.sundararaghavan@utoledo.

Present	Proposed
Supply all information asked for in this column.(Supply core, research intensive and transfer module info if applicable)	Fill in appropriate blanks only where entry differs from first column.
College*: College Business and Innovation	**College**: College Business and Innovation
Dept/Academic Unit*: Info Operations and Tech Management	**Dept/Academic Unit**: Info Operations and Tech Management
Course Alpha/Numeric*: OPMT - 5520	**Course Alpha/Numeric:** OSCM - 5520
Course Title: Analysis of Manufacturing and Service Systems	**Course Title:** Analysis of Manufacturing and Service Systems
Credit hours: Fixed: 03 or Variable: to	**Credit Hours:** Fixed: 03 or Variable: to
CrossListings: Insert. To add a course, type in course ID and click the Insert button. To remove a course, select the course on left and click the Remove button. Remove	**CrossListings:** Insert. To add a course, type in course ID and click the Insert button. To remove a course, select the course on left and click the Remove button. Remove
Prerequisite(s)(if longer than 50 characters, please place it in Catalog Description):	**Prerequisite(s)**(if longer than 50 characters, please place it in Catalog Description):
Corequisite(s)(if longer than 50 characters, please place it in Catalog Description):	**Corequisite(s)**(if longer than 50 characters, please place it in Catalog Description): OPMT 5510 or OSCM 5510 with C or better

Catalog Description (*only if changed*) 75 words max:

Concepts, methods and strategies for designing and managing manufacturing and service systems in the context of a supply chian are discussed. Topics include creating flexible and efficient systems for producing services and goods, total quality management, time-based competition, global production and sourcing.

Catalog Description (*only if changed*) 75 words max:

Concepts, methods, tools and techniques for designing and managing manufacturing and service systems in the context of a supply chain are discussed. Topics include creating flexible and efficient systems for producing services and goods, total quality management, inventory management, and scheduling.
Pre-requisite or Co-requisite:
OPMT 5510 or OSCM 5510

Has course content changed? ○ Yes ◉ No

If course content is changed, give a brief topical outline of the revised course below(less than 200 words)

Course content has not been changed in a significant manner.

Proposed effective term*: 201740 (e.g. 201140 for 2011 Fall)

File Type	View File
Syllabus	View
Attachment	View

List any course or courses to be deleted. Effective Date:

Effective Date:

Comments/Notes:

Rationale:

In general, Operations and Supply Chain Management is a better description of the program we are doing and the name for the undergraduate major was changed in 2015 along with all courses renamed and modified as needed to OSCM from OPMT. We are carrying out a similar process for the graduate courses. That is OPMT will be phased out and OSCM will be used for courses in the area offered by the department.

Approval:

Department Curriculum Authority:	Bassam Hasan	Date 2017/04/10
Department Chairperson:	P. S. Sundararaghavan	Date 2017/04/11
College Curriculum Authority or Chair:	Michael Mallin	Date 2017/04/11
College Dean:	Anand S. Kunnathur	Date 2017/04/11
Graduate Council:	Constance Schall, GC mtg 5/2/17	Date 2017/05/03
Dean of Graduate Studies:	Amanda C. Bryant-Friedrich	Date 2017/05/04
Office of the Provost :	marcia king-blandford	Date 2017/05/10

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Administrative Use Only

Effective Date:	2016/08/22 (YYYY/MM/DD)
CIP Code:	
Subsidy Taxonomy:	

Program Code:	
Instructional Level:	

Registrar's Office Use Only

Processed in Banner on:	2017/05/15
Processed in Banner by:	Tasha Woodson
Banner Subject Code:	OSCM
Banner Course Number:	5520
Banner Term Code:	201810
Banner Course Title:	Analysis of Manufacturing and Service

OSCM 5520 Analysis of Manufacturing and Service Systems

The University of Toledo

College of Business and Innovation
OSCM 5520

Instructor:	P. S. Sundararaghavan (Sundar)	**Class Location**:	SB 1200 A
Email:	p.sundararaghavan@utoledo.edu	**Class Day/Time**:	
Office Hours:		**Lab Location**:	NA
Office Location:	Stranahan 4034	**Lab Day/Time**:	NA
Office Phone:	419 530 2456. Cell 734 972 0982	**Credit Hours**:	03
Term:	Fall 2016		

COURSE/CATALOG DESCRIPTION

Concepts, methods, tools and techniques for designing and managing manufacturing and service systems in the context of a supply chain are discussed. Topics include creating flexible and efficient systems for producing services and goods, total quality management, inventory management, and scheduling.

OVERVIEW

The purpose of this course is to provide an overview of operations management for MBA students. Operations include the parts of the organization, which are responsible for producing the goods and services all of us consume. Operations are the process by which people, capital, and materials (inputs) are combined to produce these goods and services (outputs). The course examines issues from product design, capacity planning, process flow and layout to materials management and quality control. The course addresses both short-term and long-term decisions that affect the performance of the organization.

Specific Course objectives:

1. Understand the concepts of Operations Strategy.
2. Designing products, services and processes.
3. Concepts of quality for manufacturing and service organizations.
4. Concepts and tools for management of materials such as inventory management, materials requirements planning etc.
5. Basics of Operations management tools such as scheduling and project management.

TEACHING STRATEGIES

All classes will be face to face. Email, Blackboard and office meetings may be used. Students with specific academic questions may call my office or cell during reasonable times. Other learning activities like games may be used.

PREREQUISITES/COREQUISITES

Statistics (OPMT 5510 or equivalent).

REQUIRED TEXTS AND ANCILLARY MATERIALS

Textbook: Operations and Supply Chain Management by Jacobs and Chase. Edition: 14E check UT book store for special UT edition. (Same authors have several similarly titled text books and hence be careful to look for the specific book.)

Home work license and related materials (e-book access comes with the homework access license) may be purchased by going through the McGraw hill Connect Course website (specific to this course) link given below.

http://connect.mheducation.com/class/p-sundararaghavan-opmt_5520_falll_2016_analysis-0f-manufacturing-and-service-systems

TECHNOLOGY REQUIREMENTS

Blackboard, accessing Blackboard collaborate (within BB), statistical packages available in the COMI computer labs. Access to McGraw-Hill Connect plus to do homework.

UNIVERSITY POLICIES

Policy Statement on Non-Discrimination on the basis of Disability (ADA)

The University is an equal opportunity educational institution. Please read The University's Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance.

Academic Accommodations

The University of Toledo is committed to providing equal access to education for all students. If you have a documented disability or you believe you have a disability and would like information regarding academic accommodations/adjustments in this course please contact the Student Disability Services Office.

ACADEMIC POLICIES

Important points:

1. Attend all classes. (Attendance will be taken every day. Participation and attendance will be graded and included in the overall course grade.
2. Check Blackboard and your emails from me regularly.
3. Anticipate the skills/knowledge you will be tested on.
4. Feel free to ask me questions in class or make me go over materials you do not understand,
5. Visit with me during office hours, call me when needed urgently, etc.

The syllabus may be modified to improve effectiveness and meet the needs of the course. ***No make-up exams will be given, unless you have an extreme emergency on the day of the exam (some supporting documents required). Contact me as soon as possible. COBI student code of conduct will be followed.***

COURSE EXPECTATIONS

You are expected to submit assignments on time and take exams as per schedule and attend all classes and participate in all classes. If there are any extraordinary issues that you are facing, contact me as soon as possible.

GRADING

Points distribution may be adjusted slightly to keep up with the amount of coverage and variance in emphasis/interests, etc. Full disclosure will be made if any changes are done.

Midterm Grading

Midterm test grade is a good reflection of your current status in the course.

Final Grading

Item	Points
Midterm exam in-class	500
Final Exam on Tuesday December 13th from 5:00 to 7:00 PM	700
Home work and participation(about 50 points)	600
Sample Midterm and Sample Final (based on grades obtained in the sample midterm and sample final) Required assignment	200
Total	2000

Grading Scale:

Score range (%)	Letter grade	Score range (%)	Letter grade	Score range (%)	Letter grade
93-100	A	83.3-86.6	B	73.3-76.6	C
90-92.9	A-	80.0-83.2	B-	<73.3	F
86.7-89.9	B+	76.7-79.9	C+		

COMMUNICATION GUIDELINES

Email is the best way to get to communicate. You can call my cell number if there is an urgency at reasonable times. Emails will be replied within 48 hours.

STUDENT SUPPORT SERVICES

See me in my office hours or request an appointment.

COURSE **SCHEDULE**

The syllabus may be modified to improve effectiveness and meet the needs of the course. ***No make-up exams will be given, unless you have an extreme emergency (with some supporting documents).***

Typical Class Schedule

	Chapter	
Week of August 22, 2016	Ch 1 and 2	Introduction Ch 01 and Ch 02 Strategy.
Week of Aug 29, 2016	Chapter 3	Design of Products and Services
Week of Sep 5 , 2016	Chapter 04	Project management Problems and discussions.
Week of Sep 12, 2016	Chapter 05	Strategic Capacity management
Week of Sep 19, 2016	Chapter 07 and 9	Manufacturing Processes and Service Processes
Week of Sep 26, 2016	Chapter 10 and Chapter 11	Waiting line Analysis and Process Design and Analysis
Week of Oct 3, 2016	(10-04-2016 Fall break.) 10-6-2016	Catch up and review for midterm.
Week of Oct 10th , 2016	Midterm week	***Oct 11th 2016. Sample midterm (worth 60 points) due at the beginning of the class and review for Midterm.***

		In-class Midterm on October 13th.
Week of Oct 17th , 2016	**Chapter 12**	Six Sigma quality
Week of Oct 24th , 2016	Chapter 13	Statistical quality control.
Week of Oct 31st , 2016	Chapter 17 and 19	Enterprise Resource Planning (ERP) and Sales and Operations Planning
Week of Nov 7th , 2016	Chapter 20	Inventory Management
Week of Nov 14th , 2016	Chapter 21	Materials Requirements Planning
Week of Nov 21st 2016	Catch up Chs 20 & 21 and Chapter 22	Worker center scheduling
Week of Nov 28th , 2016	Chapter 23 and 24	Theory of Constraints and Health care processes
Week of Dec 5th 2016	Review	Final exam review. Sample final worth 60 points due at the start of class on December 8th , 2016.
Dec 13th (Tuesday), 2016		***Final exam* (closed book: One 8.5 by 11 page both sides will be allowed) *from 5:00 to 7:00 PM in the regular class room.***

Homework:

All homework will be assigned through the McGraw Hill connect system. (Website link provided at the beginning of the syllabus.) If you purchased the text book from UT Bookstore, instructions for logging on to the system will be at the end of your text book along with the code for logging on. If you want to buy the e-book you can go to the website in the syllabus and purchase the Connect plus homework system for about 130. You cannot get by with a used book, since access to connect homework is mandatory. This is required and you cannot pass the course without the connect plus. I always take the highest of all attempts. Usually, two attempts will be allowed for all Multiple choice homework. For problem based homework, you have two attempts, but the time is not restricted. You are allowed to check the accuracy of your answer as you do the problems. You will get the correct answers to the homework only after due date. Usual deadline for all homework is Sunday night 11:55 pm (there may be some exceptions.) All homework till midterm will be open in a few days. Post midterm will open up after midterm.

List of HW problems to be done through Connect: (may be changed occasionally to improve effectiveness)

Home work	Points	Problems in HW
HW_MC_Ch_01_Introduction	13	
HW_Problems_Ch_01_Introduction	5	1-9;
HW_MC_Ch_02_Strategy	10	
HW_Problems_Ch_02_Strategy	15	2-14,2-17,2-19
HW_MC_Ch_03_Design of Products and Services	10	
HW_MC_Ch_04_Projects	10	
HW_Prob_Ch_04_Project	24	4-5;4-8;4-9
HW_MC_CH_05_Strategic Capacity Management	10	
HW_Prob_Ch_05_Strategic Capacity Management	20	5-4;5-8
HW-MC_CH_07_Manufacturing Processes	10	
HW_Prob_Ch_07_Manufacturing Processes	20	7-8;7-16
HW_MC_CH_09_Service Processes	12	
HW_MC_CH_10_Waitin g Line and Simulation	13	
HW_Prob_Ch_10_Waiting Line Analysis and Simulation	30	10-6;10-7;10-16
HW_MC_CH-11_Process Design and Analysis	10	
HW_Prob_Ch_11_Process Design and Analysis	20	11-1;11-11
HW_MC_Ch_12_Six Sigma Quality	14	
HW_Prob_Ch_12_Six Sigma Quality	10	12-7;12-10
HW_MC_CH_13_Statistical Quality Control	12	
HW_Prob_Ch_13_Statistical Quality Control	30	13-2;13-5;13-7;13-9

HW_MC_CH_17_enterprise Resource Planning	10	
HW_Prob_Ch_17_Enterprise Resource Planning Systems	10	17-11;
HW_MC_CH_19_Sales and Operations Planning	10	
HW_Prob_Ch_19_Sales and Operations Planning	30	19-7;19-14;
HW_MC_CH_20_Inventory Management	22	
HW_Prob_Ch_20_Inventory Management	40	20-4;20-12;20-13;20-15;20-19
HW+MC_CH_21_Materials Requirements Planning	17	
HW_Prob_Ch_21_Materials Requirements Planning	30	21-10;21-11;21-18
HW_MC_CH_22_Work Center Scheduling	14	
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HW+MC_Ch_23_Theory of Constraints	7	
HW_Prob_Ch_23_Theory of Constraints	12	23-12;23-18
HW_MC_Ch_24_Health Care	20	
Participation	50	
Total	600	

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College of Business and Innovation
OSCM 5520

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