MGMT 324 – Operations Management Spring 2016, Moravian College - Economics and Business Department Tuesdays and Thursdays, 1:10pm – 2:20pm, PPHAC102

Instructor Information:

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Office Hours: Monday & Tuesday, 3-4:30pm Fax: 610-861-1466 Blackboard: <u>http://blackboard.moravian.edu</u>

Course Description:

Introduction to managing the supply side of profit and not-for-profit organizations, and their production of goods and services. Includes process improvement, scheduling, materials management, and quantitative methods for operations management.

General Description

Operations Management familiarizes the student with the decision challenges and analyses tools that mid-level manufacturing and service operations managers recurrently face in business, non-profit or government organizations. Such managers must regularly decide "What kind of product or service, how much product or service will my organization recurrently provide next month or next year?" and how will resources be acquired and configured to meet these objective?." The analysis tools covered in this course respond to these basic questions.

The course also familiarizes students with the analyses tools and management control techniques in common usage today to successfully project manage the organization's responses to non-recurrent "one time only" objectives that arise from time to time in operations departments.

Learning Objectives:

- The student will gain an understanding of the issues and analysis tools frequently used to plan and control the flow of work in production and service environments, such as:
 - Quality management
 - New product development
 - Process design for factory and service environments
 - Forecasting unit demands that factory and service organizations must respond
 - Managing inventories
 - Capacity planning
 - Supply chain design and management

2) The student will also learn the basics of project management, including:

- Developing a Project Requirement document (PRD)
- Developing a Work Breakdown Structure
- Forecasting a project budget
- Forecasting a project schedule
- Establishing a Project Baseline

This course presumes student familiarity with basic graphical analysis, algebra, statistics & EXCEL.

Learning approach

Learning objective 1) listed above will be accomplished using Lectures, in-class problem labs and written homework assignments to cover operations management topics such as units demanded

forecasting, product/service design, capacity planning, resource allocation, inventory management, quality management and supply chain management

Learning objective 2) will be accomplished through a multi-week, instructor directed project management plan creation assignment. This assignment will require that each student create and deliver a complete project management plan suitable for managing the design and construction of a people mover in a large shopping mall.

The course will also include two midterms and a final exam

Required text and other learning materials:

<u>Required text</u>: K. Boyer & R. Verma, *Operations and Supply chain Management for the 21st Century* 1st edition, 2011 (ISBN: 9780618749331)

The instructor will post all lecture notes, supplementary readings and assignments in the "course information" tab of the course's Blackboard shell.

Most lectures will follow the Boyer & Verma text's ways of explaining the course's topics. However, the instructor will also provide information supplemental to the Boyer and Verma coverage in some chapters and will condense or drop some material in other chapters

Homework problem assignments will generally be from problems at the end of the Boyer & Verma chapters. Answers to all quantitative homework problems will be provided to students after they turn their weekly homework in..

Students are required, to do the text reading assignments that are listed in the class schedule below and that will also be posted in blackboard. <u>Such readings will be particularly beneficial to students</u> who regard their quantitative skills as weak.

Calculators and computers

<u>A simple pocket calculator will be needed for homework and exam problems</u>. Whatever calculator you use, take time to master its keyboard commands, well before exam dates.

EXCEL will also be used from time to time, particularly for some homework problems (hand in your printouts). Use of EXCEL will provide the student with hands on exposure to the quantitative tools widely used in modern organizations. However, students are required to do most of the homework problems with pencil and calculator because EXCEL tools do not provide the depth of understanding of method that pencil and calculator does and also since laptops can not be used in exams.

Assignments and exams:

The course's objectives will be achieved using a combination of lectures, in-class problem labs, homework problems, exams and assigned readings. Time permitting, some videos will also be shown and class discussions related to the videos will assess their import. In addition, over the course of the semester students will be preparing chapters that will go into a complete project plan necessary to design and install a people mover in a large shopping mall to become familiar with

Two midterms and a final exam will provide a cover the material in the Boyer and Verma text and the instructor provided supplements to that text. Each of the two midterms and the final will not be cumulative in terms of the specific topics each exam covers.

Grades and grading policy statement:

Grading will be done by adding the scores earned for the following course deliverables.

20 points maximum
20 points maximum
2 points deducted per absence

The exams will not be cumulative in coverage. The tests will be approximately 20-40% short essay and 60-80% problems. Test problems will be very similar to those worked in class and in homework.

Grading in this course will not be done on a curve. If you earn an A you get an A, regardless of the grade any other student gets

Further, it is intended and fully expected that every student will be successful in this class. <u>The main</u> things that will insure this success is turning in homework and project management assignments.**complete and on time.** To see this, assume that a student gets all satisfactory homework and project management assignments and thus, accumulates 40 points in the grade bank. However, due to personal life stress, or whatever, this same student also experience the highly unlikely result that he or she winds up with a D grade on all three exams (i.e. only 12 out of 20 possible points on each test). Even with the three D test results, he or she will still wind up with a C total point score of 76 i.e.: (12+12+12+40) at the end of class.

Homework Assignments:

Student homework deliverables will be due on all classes except for exam days, at the start of class.

All homework must be submitted in hard copy format. <u>E-mailed homework will not be accepted</u> without permission of the instructor. Also, as a courtesy, please staple all homework assignments.

Written homework assignments will be graded on an S/U basis. <u>S will be the grade if the homework</u> is complete and evidences a respectable level, whether or not each problem or essay is completed perfectly. Incomplete homework or homework submitted one class late will be graded S- (half credit). <u>Homework turned in more than one class late will be graded U, (zero)</u> unless explicitly excused by the instructor.

Students who find, at the last minute, that they will be unable to attend a class (e.g. due to an unanticipated business travel) are expected to submit the homework by dropping it the instructor's mail slot in the CGS office in 207 Benigna Hall, **before** the start of the next class.

<u>Pencil with free hand drawn graphs are fine for quantitative homework problems.</u> Formats for written assignments will be typed single space, in a 12 point Arial or Times new Roman font.

Hand written homework submittals for essay style questions and Project Management Plan deliverables will not be accepted, unless otherwise noted in Blackboard.

NOTE THAT ALL HOMEWORK ASSIGNMENTS ARE DUE AS SCHEDUELED, IRRESPECTIVE OF ANY EXCUSED OR UNEXCUSED ABSENCE FROM CLASS

Office hours and meetings

My office hours in 207 Benigna will be Monday & Tuesday, 3-4:30pm or by appointment. I can also easily be reached by e-mail during most weekdays..

PLEASE DON'T HESITATE TO CONTACT OR MEET WITH ME IF YOU ARE HAVING PROBLEMS, PARTICULARLY WITH ASSIGNMENTS

Other Important Information

Academic Honesty

Students are expected to comply with Moravian College's policy on academic honesty as found in the "Moravian College Comenius Center Graduate Academic Policies Handbook" when preparing assignments and reports, or taking quizzes and exams. Please make yourself familiar with that policy. If you do not have a copy of the Handbook please request one from the Comenius Ctr. Office.

Moravian's cheating and plagiarism policies will be followed for both homework assignments as well as exams.

Attendance Policy

<u>Attendance at all three exams is mandatory</u>. Students missing an exam without prior notification and permission from the instructor will receive a grade of zero for that exam.

Blackboard

All students must enroll for the course on Blackboard. There is no access code. All class lecture notes, homework assignments and exam study guides will be put into the Course Information section of Blackboard, ahead of their due dates. <u>Students are strongly encouraged to print out the day's lecture notes ahead of each class so they can follow the discussion more easily and add their own margin notes as needed.</u> Also, students will be notified of any class cancellations or assignment schedule revisions through Blackboard, so it should be checked prior to every class.

When you register for the class in Blackboard, please be sure to list an e-mail address that you check regularly, so you can be reached in the event of a storm or disruption.

When there is a conflict regarding assignments posted in Blackboard and the class schedule at the end of this syllabus, **Blackboard should be regarded as definitive**.

Students must maintain their current phone and regularly viewed e-mail contact information in blackboard. To do this click "My places" in the upper right of the browser window displaying Blackboard. Next click on personal information and then edit personal information and update your information as needed.

Students can also e-mail each other directly through blackboard by going to tools then users then e-mail selected. Students and select the e-mail address of the specific student(s) you wish to contact.

Cancelled Classes

Class may be canceled due to weather or for some other reason. I will send out an e-mail notice through the email address you enter when you register for the course in Blackboard.

Copyrights

Only the copyright holder has the right to make copies of books, articles, cases, software, and other copyrighted material. Anyone else (you, the reader) must have the copyright holder's permission to make copies unless the item being copied falls under the Copyright Law's "fair use" provision or is in the public domain. You must get permission from the copyright holder to make any copies legally of any copyrighted materials.

Disabilities

Students who wish to request accommodations in this class for a disability should contact the Academic Support Center, located in the lower level of Monocacy Hall, or by calling <u>610-861-1401</u>. Accommodations cannot be provided until authorization is received from the Academic Support Center.

e2Campus

In the event of an emergency the system called e2Campus allows Moravian College to send text messages to the cell phones of registered members of the campus community with information about what is happening and/or what precautions should be taken. Up to two cell phone numbers and two e-mail addresses per user may be registered. This service is an integral part of the College's emergency response system. If you are not already registered on the system, please do so as soon as possible. To register for e2Campus visit http://intranet.moravian.edu/e2campus/index.asp from a computer on Moravian's campus.

Expectations of Students

As a matter of courtesy and professionalism, students are expected to make every effort to be on time for class and to participate in discussions in a manner appropriate for mature adults. Classes will generally start on time and late arrivals will be expected to catch up with the discussion on their own, without disrupting other students.

Students are allowed to bring non-alcoholic beverages to class as long as they clean up and dispose of their cups, bottles and cans after class ends. FOOD OR SNACK CONSUMPTION WILL NOT BE ALLOWED IN THIS CLASS to avoid burdening other students with the noise and odor disruptions that such eating in class frequently entails.

ALSO, NO TEXT MESSAGING, CELL PHONING, FACEBOOKING, ETC. IS PERMITTED IN THE

CLASSROOM WHEN CLASS IS IN SESSION. Offenders will be asked to leave the room. If you need to be reachable from home or work during class you can take whatever phone call or respond to whatever text message you need to by simply leaving the class room area after your cell phone rings and then return to class when your outside communication is concluded.

Grading Judgment

It is within the instructor's purview to use qualitative judgment in determining assignment or course grades

Inclement Weather

In the case of inclement weather, the instructor will post a message on Blackboard to inform students if the class is canceled. It is the student's responsibility to check Blackboard prior to each class period for cancellations due to inclement weather.

Syllabus Status

This syllabus and the course contents are subject to change at the discretion of the instructor. Generally changes will be finalized only after discussion of the change with students in the class.

Workload

Students can expect to work at least five hours on average outside of class in reading, studying and homework preparation hour of class time. THIS MEANS THAT 10 HOURS PER WEEK OF YOUR FOCUSED EFFORT, IN ADDITION TO 2 HRS IN CLASS, ARE WHAT IS EXPECTED IN THIS COURSE

Style guide

Homework problems can be hand written and figures freehand drawn. Essay responses must be typed.

Inclusion

Moravian College is a welcoming community that embraces and values the diversity of all members of the campus community. We acknowledge the uniqueness of all individuals, and we seek to cultivate an environment that respects, affirms, and defends the dignity of each member of the community. Moravian College complies with all federal and state laws regarding nondiscrimination in recruitment, admission, and employment of students, faculty, and staff.

You may wonder what that statement means. For the purposes of this class, the statement means that all persons, regardless of actual or perceived race, color, sex, religion, ancestry, genetic information, national origin, sexual orientation, gender identity or expression, familial status, marital status, age, mental or physical disability, use of guide or support animals and/or mechanical aids have an equal opportunity to participate and learn in this class and are to be treated equally in an inclusive and supportive manner.

In other words, in this class we all promote a culture of inclusion that welcomes and supports people of varying backgrounds, different viewpoints, experiences, talents, and ideas. By respecting and valuing these differences we can make problem solving and decision making multi-dimensional leading to more learning and better outcomes for all, including project clients.

Behavior	Description
Listening to understand	Listening with an open mind to fully understand all aspects of a situation
Seeing multiple points of view	Understanding that our perspective is not the only one when looking at a situation, issue, or person
Giving and receiving feedback	Inviting and giving feedback
Enhancing inclusion	Helping others feel included and involved
Addressing inappropriate behavior	Acknowledging inappropriate behavior; communicating expectations and consequences for repeated behavior.

Behaviors such as those listed in the table below will lead to an inclusive classroom culture.

Source: MIT Human Resources, Diversity & Inclusion, http://hrweb.mit.edu/diversity/affirmative-action-plan-admins/resources

MGMT 324 CLASS SCHEDULE, Spring, 2016 (This schedule is subject to change at the instructor's discretion)

- 1/19 Syllabus review
 Lecture: Chapter 1 Operations and Supply Chain overview
 Lecture: Chapter 2 part 1 Importance of managing quality to operations managers
 Recommended reading, due 1/21 Boyer & Verma, Ch.2
 Written Homework due 1/26 see Blackboard.
- 1/21 Lecture: Chapter 2, part 2 In class problem lab on Ch.2 Reading, due 1/26 - Boyer & Verma, Ch.3 Written Homework due 1/26 - see Blackboard.
- 1/26 Ch. 2 Homework problem review Lecture: Chapter 3 – Product design Reading, due 1/28 - Boyer & Verma, Ch.4 Written Homework, due 2/2 - see Blackboard. Written homework on KOP PRD, due 2/2
- 1/28 Lecture: Chapter 4 process design, part 1 Lecture: Project Management-Preparing the Project Requirements Document (PRD) Reading, due 2/2 - Boyer & Verma, Ch.4, part 2 Written Homework, due 2/2 - see Blackboard. Prepare draft KOP PRD, due 2/2
- 2/2 Lecture: Chapter 4, part 2
 In class problem lab on Ch. 4
 Reading, due 2/4 Boyer & Verma, Ch.5, pages 144-164
 Written Homework, due 2/4 see Blackboard.
- 2/4 Ch. 4 part 2 Homework problem review Lecture: Chapter 5 forecasting, part 1 Reading, due 2/11 - Boyer & Verma, Ch.5, pages 165-179 Written homework on Ch. 5, part 1, due 2/9 Prepare final KOP PRD, due 2/9
- 2/9 Ch. 5 part 1 homework problem review Lecture: Chapter 5 Forecasting, part 2 In class problem lab on Ch. 5, part 2 Written Homework, Ch. 5, part 2 due 2/16 - see Blackboard.
- 2/11 Midterm 1 covers chapter 1 through 4
- 2/16 Ch. 5, part 2 homework problem review
 Project Management Plan preparing the work breakdown structure, due 2/25
 Reading, due 2/24 Boyer & Verma, Ch.6, due 2/27
 Prepare KOP WBS, due 2/23
- 2/18 Lecture: Chapter 6, part 1 independent demand inventory management In class problem lab on Ch. 6 part 1 Written homework on chapter 6, part 1, due 2/23, see blackboard
- 2/23 Chapter 6, part 1 homework problem review Review of KOP Work breakdown structure Project budgeting Prepare KOP budget forecast, due 3/3

- 2/25 Lecture: Chapter 6, part 2 In class problem lab on Chapter 6, part 2 Reading, due 3/3 - Boyer & Verma, Ch.7
- 3/3 Review of homework on Ch.6, part 2 Lecture: Ch. 7
 Written homework on chapter 7, due 3/15, see blackboard Reading, due 3/15, Boyer & Verma, Chapter 10
- 3/8 Spring break
- 3/10 Spring break
- 3/15 Lecture: Chapter 10 Capacity Planning Written homework on chapter 10, due 3/17, see blackboard
- 3/17 Ch. 10 homework review Preparing a project schedule Prepare KOP project schedule, due 3/24 Read Chapter 11, due 3/24
- 3/22 Midterm 2 covers chapters 5 through 7
- 3/24 Review of KOP schedule Lecture: Chapter 11 Written homework on chapter 11, due 3/29 Read Chapter 12, due 3/31
- 3/29 Preparing a project baseline Prepare KOP project baseline, due 4/5
- 3/31 Lecture: Chapter 12 Written homework on Chapter 12, due 4/5
- 4/5 Lecture: Introduction to Supply chain management Written homework on supply chain lecture, due 4/12
- 4/7 Lecture: Supply chain management part 2 Written homework on Supply chain part 2
- 4/12 Lecture: Supply chain management tools the Newsvendor model
- 4/14 In class problem lab on Newsvendor model Written homework on Newsvendor model, due 4/19
- 4/19 Lecture: Future supply chains when products become smart and connected
- 4/21 Lecture: Supply chain management tools Linear programming Homework on linear programming, due 4/26
- 4/26 Video: Is Walmart good for America Homework on Walmart video, due 4/28
- 4/28 Final exam review
- 5/? Final exam: covers chapters 10 through 12 and Supply chain related material