

# TOMS 5302 A OPERATIONS MANAGEMENT WINTER 2017

Professor:Uma KumarEmail:uma.kumar@carleton.caOffice:1719 DTPhone:613 520 2600 ext. 6601Office Hours:By appointment

### A. COURSE OVERVIEW

Operations management encompasses the body of knowledge concerning management of the day-to-day operations of any type of company. It may be defined as the design, operation, and improvement of the systems that create the firm's products and services. As Ritzman et al. puts it 'In essence, operations management is really about creating customer value through the effective and efficient management of processes, including product, service, and product design'.

Three critical themes of operations management are emphasized: effective process management, the importance of cross-functional integration, and the role of operations in the creation of customer value.

This is a **first level course** in the area of operations management specifically designed for MBA class to be delivered as 0.25credit course. We will emphasize on limited topics in the course keeping in mind that at the end of the course you would have developed the abilities i) to recognize and solve an operations problem, ii) to present and discuss intelligently an operations issue with staff and management; iii) to identify necessary skill set that would be required to solve a complex operations problem; iv) to see the impact of decisions and actions of operations area on other functions of the organization.

The Operations area is very broad and given the short time for the course we will be able to deal with limited topics. In particular, the following topics, some in depth while others at conceptual level, will be covered:

- Creating Customer Value through Operations
- Process Management

- Project Management
- Quality Management: Focus on Statistical Quality Control
- Capacity Planning
- Operations Planning and Scheduling

### **B. CALENDAR DESCRIPTION**

The provision of services and goods to customers, with focus on efficiency, effectiveness, and productivity. Planning and control of processes involving products, workers, equipment, suppliers, and customers. Effects of variation and uncertainty on lead time, inventory, quality, and customer service.

Prerequisite(s): **BUSI 5801**.

### C. LEARNING OBJECTIVES and LEARNING OUTCOMES

Upon completion of this course, students should:

- (a) demonstrate an understanding of key issues facing managers in making decisions about the design, operation and improvement of systems that create the organization's products and services.
- (b) be able to recognize the pivotal value of operations in the creation of customer value.
- (c) understand the interrelated processes of a firm which connects operations with all other functional areas of an organization.
- (d) demonstrate knowledge of OM concepts/tools and apply them to design, plan, coordinate and control operations within an organization

#### **D. COURSE ORGANIZATION**

The format of the course consists of a mixture of lectures, exposing the relevant material, case discussions on specific applications of management science approaches, and in-class problem solving. Students are required to read the assigned reading materials prior to the respective class. For some selected readings, a written report will be required (due at the beginning of the class), marked and will contribute to the overall course evaluation. Learning will also be enhanced through a set of review problems that will be assigned to practice some of the management science approaches discussed in class. The answers to these problems are not to be handed in, but should assist you in-class problem solving and discussion.

### **E. COURSE MATERIAL**

# **REFERENCE TEXTBOOKS**

L. P. Ritzman, L. J. Krajewski, M. K. Malhotra and R. D. Klassen, Foundations of Operations Management, 3<sup>rd</sup> Canadian Edition, Pearson Education Canada.

Note: Only Chapters 1, 3, 4, 6, 8, and 11 or its parts from the reference book are required.

An e-book was created for this course but unfortunately, because of the policies of the publisher, they have removed the e-book platform. I am negotiating with the publisher for some arrangement so you all can have access to the book.

# SOME OTHER OM REFERENCE BOOKS

W. J. Stevenson, Operations Management, Irwin/McGraw-Hill.

N. Gaither and G. Frazier, Production and Operations Management, South Western College.

R. S. Russell, and B.W. Taylor III, Operations Management, Multimedia version, Prentice Hall.

J. Heizer and B. Render, Principles of Operations Management, Prentice Hall.

J. R. Evans and W.M. Lindsay, The Management and Control of Quality, Thomson South Western Publishers.

J. R. Meredith and S. J. Mantel, Jr., Project Management: A Managerial Approach, John Wiley & Sons.

D. P. Hobbs, Lean Manufacturing Implementation, J. Ross Publishers.

T. Burton, The Lean Extended Enterprise, J. Ross Publishers.

W. J. Stevenson and M. Hojati, Operations Management, McGraw-Hill Ryerson.

R. B. Chase, N.J. Aquilano and F.R. Jacobs, Operations Management for Competitive Advantage

### **USE OF SOFTWARE**

You may use any software package which contains Management Science models. Microsoft Excel software tool or other tools introduced in the Modeling Business Decisions course can also be used.

### CASE STUDIES

We will use the following six case studies in the course. You will be provided a copy of these cases in class.

- Chad's Creative Concepts (Creating Customer Value)
- Custom Molds, Inc (Process Configuration)
- The Pert Studebaker (Project Management)

- Fitness Plus (Capacity Planning)
- José's Authentic Mexican Restaurant (Quality and Process Improvement)
- Gretchen's Kitchen (Aggregate Planning)

# F. COURSE EVALUATION

#### **Course Design**

The course will consists of seminars, class discussions, case assignments for class presentation and write-up, and a final exam. The grading scheme is as follows:

Class Participation	20%	Individual work
Case Presentations	10%	Group work
Case Write-up/Managerial Report	20%	Group work
Final Examination	50%	Individual work

The due dates of the above mile-stones will be announced in the class.

#### **Class Participation – Contribution to Class Discussions (20%)**

The general guidelines are: Read all the required readings and participate in class discussions as actively and constructively as possible. I will grade each student's participation in class discussions. The continuum of the instructors' evaluation ranges from 0 to 4. That is, the minimum possible mark for participation in each class discussions is 0, the maximum is 4. Therefore, the total highest mark for participation in class discussions throughout the course is 20, the lowest is 0 (first session will not be counted).

Instructor will evaluate your participation in class discussion by applying the following criteria:

1. Did the student participate in today's class discussion (other than the assigned role of case presenter or case discussant- as there are separate marks assigned for that)?

2. Was there evidence that the student's participation in the discussion was based on his or her knowledge of the required readings? Did the student really read ALL readings assigned for a given class or was the student's discussion based only on his or her past experience and/or common sense? (For classes in which readings/cases are required)

3. Was the student's discussion appropriate and to the point?

4. Did the student contribute to class learning?

Class discussions provide an opportunity to manifest your creative abilities.

#### **Class Presentations (10%)**

There will be 7 groups in the class, each comprising of a minimum of 4 and maximum of 5 students (based on current enrollment of 30). Each group will be making ONE presentations on the Case. Each member in the group will be responsible for a part of the presentation. Marks will be based on the group performance.

#### Case Write-up (20%)

There will be 6 cases discussed in this course. You will be required to hand in write-up for one case (out of the first five listed above). This case should be other than the one your group is presenting. Case is worth 20% of final grade. To assist you in completing this assignment a set of questions for each case that we expect to see answered in your write up will be provided in the preceding class and/or given at the end of the case. These questions will also form the basis of our discussion in class. When handing in the case write-up DO NOT just repeat case facts. Rather, you need to analyze the material given in the case when answering the case questions. Case write-ups should be precise and to the point not exceeding typed 6 pages double spaces.

Make sure that you give the rationale behind all your recommendations. Finally, clarity of writing is an important part of communication. Marks will be taken off if the case submission is not well written.

It should be noted that the case write-ups are due before it is discussed in the class. <u>No case</u> <u>write-up submissions</u> will be accepted for grading after the discussion has begun. Please note that the managerial reports will not be returned after being marked. However, they will be available for consultation at the instructor's office. Be sure to keep a copy for yourself.

Further tips for Case Analysis are appended to the course outline.

What skills you will develop:

- 1) Ability to understand client needs and scope.
- 2) Apply quantitative and qualitative concepts taught in this course
- 3) Ability to collect relevant information, analyze it, and present it effectively.
- 4) Ability to develop a professional report
- 5) Presentation Skills
- 6) Team Work and Collaboration

#### **Final Examination (50%)**

Format of the exam will be discussed in the class. Structure of the exam and examples will be provided.

The goal of the final exam is to test knowledge acquired during the course. Examination will consist of short essay questions, qualitative and quantitative. Questions will be asked from the material covered in the class including cases, class notes and readings. Exam may include a mini-case which you would be expected to analyze and make recommendations.

We strongly recommend that you periodically review the required readings, case assignments, practice problems, and the notes you make during class discussions.

Students are advised that exam papers will not be returned back to them after being marked. They will be available for consultation only at the instructor's office. If a participant is unable to sit for the final exam, the School's office will determine the eligibility for a deferred final examination. It should be noted that deferred examinations are not granted to participants who make travel plans that conflict with the examination period. Further, the final grade in the course is subject to Dean's approval.

### Exam Date: TBA

### Case Approach

Cases are brief descriptions of a situation in which an organization finds itself at a point in time. Basically, a case study is only a story, a description of events usually in a chronological order. These events provide one source of information you will need to answer questions posed. Other source is the lecture material and research articles discussed in the class. The main purpose of the case assignment is to identify the problem(s)/opportunities facing the organization and to utilize theories and ideas you have learned in this course to make decisions on how to solve those problems. You may feel uncomfortable making such decisions even after you have done a thorough analysis of all the information in the case. Some of what you consider to be key pieces of information may be missing, but this is part of normal reality. Management decisions are never made based on complete information.

Cases will also be discussed in class. You may be called upon to discuss some aspect of a case during the case discussion. You should come to class prepared to discuss any and all aspects of the problem(s)/opportunities in the case and of the decisions you make.

The following steps are a suggested framework. You can modify them as necessary:

- Preview the Case You may read rapidly or skim through the case, taking notes and jotting down the important ideas. Discover the parameters of the problem and keep in mind the questions that have been asked
- Read the Case Once you have previewed the case, read it in detail. While reading in detail, you should be looking for major problems, variables, constraints, limitations, alternatives. Keep in mind the relevant literature which may help in solving the case. Note down the relevant points
- Identify the causes for the problem and the type of relationship between the problem and the causes.
- Identify alternative solutions and try to determine what is the best solution
- Give a recommended solution and a plan for implementation (action plan). The action plan should attempt to solve both present and future problems. Undesirable solutions that may occur in the future should also be addressed during this stage. Try to answer what,

who when and why. For example, what should be done, when it should be done, who should do it and why should it be done. Give clear rationale for the recommendation.

- Conduct risk analysis. In other words what things could go wrong if your client/organization implements your recommendations, and how organization can prepare for least damage incase unwanted situation occurs. What are suggestions you can give to the firm for smooth implementation of your recommendations.
- Writing should be well organized, logical, clear and free of any grammatical or spelling mistakes. You must support statements with facts.

### Team Approach

An interactive learning environment provides the maximum potential to explore and truly grasp the material of the course. To facilitate interactive discussion teams will be formed.

It will be necessary for the teams to meet outside of class to discuss the case analyses. In addition, during class, teams may be given topics for discussion and/or small tasks to accomplish

Good group dynamics are essential. You are strongly advised to speak to one of the instructors about group problems as soon as they arise, rather than waiting until it is too late. Instructors will do their best to help mediate group problems as needed.

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

# G. CONDUCT

Professional conduct is built upon the idea of mutual respect. Such conduct entails (but is not necessarily limited to):

- Attending the class.

Each class benefits from the attendance and participation of all participants. Class attendance is mandatory. The participation grade will be affected by absences. If any circumstances prevent attendance to the class, the participant is responsible for all materials discussed, handouts distributed, assignments covered, and announcements made.

- Arriving on time.

Late arrivals are disruptive and show disrespect to those who are on time. Late arrivals are not allowed.

- Minimizing disruptions.

You should not leave and re-enter the class. All cell phones and electronic communication devices must be be turned off during class. You should avoid engaging in side conversations after class has begun.

- Focusing on the class.

While you may take notes on laptops, do not use laptop computers or hand-held devices for other tasks while in class. Activities such as net surfing, and answering email are very impolite and disruptive both to neighbors and the class.

- Being prepared for class.

Participants must be ready to discuss any assigned readings and to answer any assigned questions.

- Respect.

Participants should act respectfully toward all class participants.

Class participation grading reflects student adherence to these principles; participants gain participation credit when they contribute with valuable insights and lose credit if they fail to adhere to any of the above guidelines.

#### H. PLAGIARISM

The University's Senate defines plagiarism in the regulations on instructional offences as: "to use and pass off as one's own idea or product work of another without expressly giving credit to another."

Borrowing someone else's answers, unauthorized possession of tests or answers to tests, or possession of material designed to help answering exam questions, are also subject to university policy regarding instructional offences. For more information on Carleton University's Academic Integrity Policy, consult: http://www.carleton.ca/studentaffairs/academic\_integrity

The photocopying of substantial portions of a textbook (e.g. more than 1 chapter or 15% of the total page count) without the publisher's permission is another misuse of intellectual property, and is also a violation of Canadian copyright law. Access Canada's website provides guidelines on legitimate copying. You may also find useful information at: http://library.wlu.ca/access/guidelines.htm

# I. CHANGES TO THE SYLLABUS

Every effort has been made to make the course outline as complete as possible, but there may be occasions when changes are required. The instructor will announce any deviations from the course outline in class.

Session	Торіс	Cases
1	Creating Customer Value Through Operations	
2	Process Configuration	
3	Managing Projects	Custom Molds, Inc G1 Chad's Creative Concepts G2
4	Capacity Planning Operations Planning and Scheduling	The Pert Studebaker G3, G4
5	Quality and Process Improvement	Fitness Plus G5
6	Quality and Process Improvement- Cont.	Gretchen's Kitchen (Aggregate Planning) <b>G6</b>
		Josè's Authentic Mexican Restaurant <b>G7</b>

**Tentative Class Schedule** 

Note: Class schedule could vary dependent on the progress we make in the course. Every student (not only presenter and discussant) is expected to read all required readings prior to the class. Please do not come to the class if you have not read the material in advance.

# **IMPORTANT ADDITIONAL INFORMATION**

#### **Required Calculator in BUSI Course Examinations**

Starting fall 2006, <u>only</u> Texas Instruments BA II Plus calculators will be permitted in all 1000-level Business course examinations.

Starting fall 2007, <u>only</u> Texas Instruments BA II Plus calculators will be permitted in <u>all</u> Business course examinations.

This calculator is available in the campus bookstore and at various other off-campus retail stores.

#### **Drop Course Policy**

The deadline for academic withdrawal is the last day of classes (each term).

### **Deferred Final Examination:**

Students unable to write a final examination because of illness or other circumstances beyond their control must contact the instructor in writing to request a deferred exam. Permission may be granted when the absence is supported by a medical certificate and or appropriate document/s to support the reason for the deferral. Deferred exams are not granted for students who have made travel arrangements that conflict with examination schedule.

#### **Person with Disabilities**

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). Requests made within two weeks will be reviewed on a case-by-case basis. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (www.carleton.ca/pmc) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

#### **Religious Observance**

Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton's Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.

#### Pregnancy

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete *a letter of accommodation*. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

### **Academic Integrity**

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: http://carleton.ca/studentaffairs/academic-integrity/.