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 0.25 credit 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; and iv) to see the impact of decisions and actions of operations area on other functions of the organization.

Students with a degree of BCom or Industrial Engineering may find course relatively easy; my attempt will be to make the course interesting, refreshing and experiential for them.

The Operations area is very broad and given the short time for the course we will be able to deal with limited topics; other topics would be covered in Supply Chain Management course. In particular, the following topics, some in depth while others at conceptual level, will be covered:
• Creating Customer Value through Operations
• Process Management
• Capacity Planning
• Quality Management: Focus on Statistical Quality Control
• Operations Planning and Scheduling
• Resource Planning

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

We will focus on topics selected to help you to accomplish the following course objectives:
1) Describe the role of the OM function in a manufacturing or service industry, and its relationship with other business functions;
2) Apply basic OM tools to design systems and operations within an organization or a whole supply chain; and
3) Apply basic OM tools to plan, coordinate, and control operations within an organization or a whole supply chain.

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), 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

Only six chapters or its parts from the above text book are required for this short course. Thus a customized in expensive version (perhaps $50/60) has been created and is available at the Carleton book store.

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<thead>
<tr>
<th><strong>Title of text book</strong></th>
<th>Operations Management</th>
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<tr>
<td><strong>Edition</strong></td>
<td>Custom e-book</td>
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<tr>
<td><strong>Author</strong></td>
<td>Vinod Kumar</td>
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<tr>
<td><strong>Publisher</strong></td>
<td>Pearson Custom Library</td>
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</table>

**SOME OTHER OM REFERENCE BOOKS**

N. Gaither and G. Frazier, Production and Operations Management, South Western College.
J. Heizer and B. Render, Principles of Operations Management, Prentice Hall.

**CASE STUDIES**

We will use the following ten case studies in the course. You will be provided a copy of these Cases.

Five cases are *short cases*; One group randomly will be allocated in the class to take the lead, attempt to solve the case in 20 minutes, and make a 10 minute presentation followed by class discussion. Presentation of the analysis could be made by any 2, 3 or 4 members of the group.

**SHORT CASES for in-class analysis and presentation will be provided in the class.**
Five cases are *NOT-so-short cases* and require several hours of group work outside of the class. The group assigned (see below) will take the lead, analyze the case, and make 20 minute presentation in the class (see tentative schedule at the end of the course outline). Presentation of the analysis could be made by preferably all members of the group.

**NOT so short cases for ‘out of the class’ analysis and ‘in class’ presentation**

- 1. Custom Molds, Inc (Process Configuration) [Group 5]
- 2. Fitness Plus (Capacity Planning) [Group 4]
- 3. Josè’s Authentic Mexican Restaurant (Quality and Process Improvement) [Group 3]
- 4. Memorial Hospital (Operations Planning and Scheduling) [Group 2]
- 5. Food King (Operations Planning and Scheduling) [Group 1]

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**F. COURSE EVALUATION**

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

- Class Participation 20% Individual work
- 2 Cases (incl. 1 short one) Presentations (including slides) 20% Group work
- 1 Case Write-up/Managerial Report 20% Group work
- Final Examination 40% Individual work

*The date of the write-up submission and the exam will be announced in the class. Exam is normally conducted in the week of February 22nd, 2016.*

**Drop Course Policy:**
The deadline for academic withdrawal is the last day of classes (each term).

**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. Five out of six classes will be graded. For each of the five classes 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.
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 - 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%+10%)**
There will be 5 groups in the class, normally each comprising of 7 students in case of Section A (current enrollment is 35) and 3 students in case of Section D (current enrollment is 16). Each group will be assigned one short case and one not-so-short case to analyze and make presentation in the class. Any 2, 3 or 4 (all) members in a group will be responsible for the presentation. Marks will be based on the group performance.

**Case Write-ups (20%)**
There will be 5 NOT-so-short cases discussed in this course. You will be required to hand in write-ups for ONE of these cases *(other than the one your group is presenting)*. The case write-up is worth 20% of the 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; you may attach Appendices only if necessary.

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.

**Deadline for Case write-up submission: TBD; Expect feedback in one week of the submission.**

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 (40%)**
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 multiple choice and short essay questions, qualitative and quantitative. Questions will be asked from the material covered in the class including cases, class notes and readings.

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.

**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.

**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 on the basis of 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
• Understand the CONTEXT and the ISSUE/PROBLEM on hand
• Identify the POSSIBLE CAUSES FOR THE PROBLEM and the type of relationship between the problem and the causes.
• Identify ALTERNATIVE SOLUTIONS, analyze PROs and CONs of each alternative, and try to determine the OPTIMUM SOLUTION.
• Give a RECOMMENDED SOLUTION and the IMPLEMENTATION 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 the instructor about group problems as soon as they arise, rather than waiting until it is too late. Instructor will do her 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 and OTHER POLICIES
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 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.

**Course Sharing Websites**

Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

**Policy on Mobile Devices**

The use of mobile devices IS NOT PERMITTED in this class. It is disruptive to the instructor and class members. If you carry such a device to class, please make sure it is turned off. If an
emergency situation requires you to keep it turned on, please discuss this with your instructor prior to class.

**Group Work**

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, followership and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your instructor may assign one or more group tasks/assignments/projects in this course.  
*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.*

**Person with Disabilities**

Students with disabilities requiring academic accommodations in this course are encouraged to contact a co-ordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with the PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the first in-class test or ITV midterm exam. This is necessary in order to ensure sufficient time to make the necessary arrangements. Please refer to [http://www.carleton.ca/pmc/](http://www.carleton.ca/pmc/) for all PMC information.

**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 cooperation 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://www2.carleton.ca/sasc/advisingcentre/academic-integrity/.

### 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.

**Tentative Class Schedule**

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<tr>
<th>Session/week</th>
<th>Topic</th>
<th>Chapter</th>
<th>Case Presentation</th>
<th>Group#</th>
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<tr>
<td>1</td>
<td>Creating Customer Value</td>
<td>Chapter 1</td>
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<td>2</td>
<td>Process Configuration</td>
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<td>Capacity Planning</td>
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<td>3</td>
<td>Chapter 2</td>
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<td>- Fitness Plus</td>
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| 4 | Quality and Process Improvement |
|   | Chapter 3                  |
|   | - José’s Authentic Mexican Restaurant |
|   | 3                         |

| 5 | Operations Planning and Scheduling |
|   | Chapter 5                  |
|   | - Memorial Hospital        |
|   | - Food King                |
|   | 2                         |
|   | 1                         |

| 6 | Resource Planning          |
|   | Chapter 6                 |

Note: Class schedule could vary dependent on the progress we make in the course. Every student is expected to read all required readings prior to the class.