

# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



## COURSE OUTLINE

**COURSE TITLE:** Operations Management

**CODE NO. :** BUS252 **SEMESTER:** 16W

**PROGRAM:** Business 2035

**AUTHOR:** Dan Kachur

**DATE:** Jan/2016 **PREVIOUS OUTLINE DATED:** Jan/2016

**APPROVED:** \_\_\_\_\_  
'Colin Kirkwood' May/2015

	DEAN	DATE
<b>TOTAL CREDITS:</b>	4	
<b>PREREQUISITE(S):</b>	None	
<b>HOURS/WEEK:</b>	4	

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School of Environment, Technology and Business.*

*(705) 759-2554, Ext. 2688*

**I. COURSE DESCRIPTION:**

The course provides the student with in depth knowledge of the concept of operations management. Students will be introduced to the general types of processes utilized by operation managers to ensure that goods and services are created and delivered successfully to customers.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will demonstrate the ability to:

**1. Define Operations Management**Potential Elements of the Performance:

- Explain the concept of Operations Management.
- Describe what operations managers do.
- Explain the differences between goods and services.
- Explain the three general types of processes.
- Describe the current challenges facing OM

**2. Explain the concept of Value**Potential Elements of the Performance:

- Describe a value chain and the two major perspectives that characterize it.
- Describe a supply chain and how it differs from a value chain.
- Discuss key value chain decisions
- Explain the concept of off-shoring.
- Identify key issues associated with value chains in a global business environment.
- Discuss how much control managers have.

**3. Describe and illustrate the processes involved in the measurement of performance in operations.**Potential Elements of the Performance:

- Describe the types of measures used for decision making
- Calculate and use productivity measures.
- Explain how internal and external measures are used.
- Explain how to design a good performance measurement system.
- Describe four models of organizational performance.

#### 4. Understand Operations Strategy

##### Potential Elements of the Performance:

- Explain how organizations seek to obtain competitive advantage.
- Explain approaches for understanding consumer requirements.
- Describe how customers evaluate goods and services.
- Describe the five key competitive priorities.
- Explain the role of OM and operations strategy in strategic planning.
- Describe “Hill’s framework for operations strategy.

#### 5. Discuss Technology and Operations Management

##### Potential Elements of the Performance:

- Identify the different types of technology and their role in manufacturing and service operations.
- Explain how manufacturing and service technology is strengthening the value chain.
- Explain the benefits and challenges of using technology.
- Describe the processes of technology development and adoption.

#### 6. Goods and Services Design

##### Potential Elements of the Performance:

- Describe the steps involved in designing goods and services.
- Explain the concept of robust design and the Taguchi loss function.
- Explain how to calculate system reliability.
- Explain the concept and application of quality function deployment.
- Describe methods for designing goods.
- Explain the five elements of service delivery system design.
- Describe the four elements of service encounter design.
- Explain the role that perception plays in communication and communication problems.

#### 7. Process Selection, Design and Analysis

##### Potential Elements of the Performance:

- Describe the four types of processes used to produce goods and services.
- Explain the logic and use of the product-process matrix
- Explain the use of the service-positioning matrix.
- Describe how to apply process and value stream mapping for process design.
- Explain how to improve process designs and analyze process maps.

## 8. Facility and Work Design

### Potential Elements of the Performance:

- Describe four layout patterns and when they should be used.
- Explain how to design product layouts using assembly line balancing.
- Explain the concepts of process layout.
- Describe issues related to workplace design.
- Describe the human issues related to workplace design.

## 9. Supply Chain Design

### Potential Elements of the Performance:

- Explain the concept of supply chain management.
- Describe the key issues in designing supply chains.
- Explain important factors and decisions in locating facilities.
- Describe the role of transportation, supplier evaluation, technology and inventory in supply chain management.

## 10. Capacity Management

### Potential Elements of the Performance:

- Explain the concept of capacity.
- Describe how to compute and use capacity measures.
- Describe long-term capacity adjustment strategies.
- Explain the principles and theory of constraints.

## 11. Inventory Management

### Potential Elements of the Performance:

- Explain the importance of inventory and types of inventory.
- Explain how a fixed period inventory system works.
- Describe the major characteristics that impact inventory decisions.
- Describe how to conduct an ABC inventory analysis
- Explain how to use the EQQ and safety stock models.

## III. TOPICS:

1. Goods, Services and Operations Management: Chapter 1
2. Value Chains: Chapter 2
3. Performance Measurement: Chapter 3
4. Operations Strategy: Chapter 4
5. Technology and Operations Management: Chapter 5

6. Goods and Service Design: Chapter 6
7. Process Selection and Design: Chapter 7
8. Facility and Work design: Chapter 8
9. Supply Chain Design: Chapter 9
10. Capacity Management: Chapter 10
11. Inventory Management: Chapter 12

#### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

OM5, South-Western Cengage Learning, Collier/Evans

#### V. EVALUATION PROCESS/GRADING SYSTEM:

Students will be evaluated as follows:

- Test #1: Chapters: 1,2,3&4 (20% of grade)
- Test #2: Chapters: 5,6,7&8 (20% of grade)
- Test #3: Chapters: 9,10&12 (20% of grade)
- Participation and Attendance (10% of grade)
- Labs and Case Studies (30% of grade)

##### **TESTS:**

All tests will consist primarily of short answer essay questions and multiple choice questions (or other objective type questions) to complement and extend the test areas. Dates of tests will be announced approximately one week in advance. **Students are required to write all tests as scheduled!!**  
**There are no Supplementary exams or re-writes of individual exams.**

Labs and mini case studies will cover key concepts introduced in the course.

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical	

U	placement or non-graded subject area. Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

## VI. SPECIAL NOTES:

### Classroom Decorum:

Students will respect the diversity and the dignity of those in the classroom. Student will respect the professor's right and duty to teach and students' right to learn without interference. Students who cause any interference with the objectives of the class will be asked to leave the classroom.

If a student is asked to leave the classroom a second time, he/she must make an appointment with the Chair of the Business Department who will decide if the student will be permitted to return to class.

Students attending this class do so to study Introduction to Management; therefore, no other activity will be permitted. Student's who wish to engage in other activities will be asked to leave the classroom, as described above.

**Cell Phones must be turned off during class time. If a student does not follow this policy they will be asked to leave the classroom.**

It is the professor's intention to maintain proper classroom decorum at all times in order to provide the best possible learning and teaching environment.

**Electronic devices used to record instruction are not allowed in the classroom with the exception of issues related to accommodations of disability. Formal accommodation documentation must be provided by the student from the Disability Services Department prior to requesting the recording of instruction.**

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. ***It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be granted admission to the room.***

**Students are expected to attend all scheduled classes. Attendance will be taken for each class on a sign in basis. In all cases, attendance of less than 80% of the scheduled classes is not acceptable.**

Return of Students' Tests, Exams and Assignments:

Tests and assignments will be returned to students during **one of the normal class times**. Any student not present at that time must pick up his/her test or assignment at the professor's office within two weeks of that class. Tests and assignments not picked up within the two weeks will be discarded. End of semester tests and assignments will be held for two weeks following the end of the semester. If they have not been picked up within that two-week period, they will be discarded.

Students are required to retain their tests and assignments in the event that there is a disagreement with the mark received and the mark recorded by the professor. If the student is not able to present the test/assignment in question, the professor's recorded mark will stand.

Contact Information:

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**VII. COURSE OUTLINE ADDENDUM:**

The provisions contained in the addendum located on the portal form part of this course outline.