COURSE SYLLABUS

COURSE TITLE:	Operations Management	**COURSE CODE:**	DSCI310
PREREQUISITES:	None	**SEMESTER:**	FALL 2020
INSTRUCTOR:	Gabriel-Marcel DEUTOU, PhD	**CREDITS:**	3
EMAIL:	deutou@icloud.com	**SCHEDULE:**	Tuesday Group 1 8h30-11h30 Group 2 12h30-15h30

COURSE DESCRIPTION:

Operations Management course is designed to give students a head start in the subject and introduce them to the key quantitative methods that are essential to decision-making process for every operations manager.

COURSE OBJECTIVES:

It is hoped that the students will understand Operations management concepts that support decision-making in four major areas:

1. Operations Strategy
2. Supply Network Design
3. Planning and Control
4. Improvement

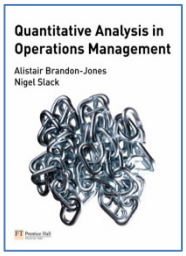
The class will be developed through readings, lectures, oral presentations and cases studies.

EXPECTED LEARNING OUTCOMES:

Upon completion of this course, students should be able to understand:

1. Time Series and Linear Regression Analysis
2. Earning Before Interest & Tax (EBIT) and net present value (NPV)
3. Productivity and Value-added Throughput Efficiency
4. Work Measurement and Mean Time Between Failure (MTBF)
5. Measuring Capacity and Overall Equipment Effectiveness (OEE)
6. Break-even Analysis and Weighted Score Method
7. Linear Programming and Transportation Method
8. Optimizing Location and Inventory

MANDATORY TEXTBOOK:



Last updated: 14-May-20

ISBN-10: 0273708481 – ISBN-13: 9780273708483

***Quantitative Analysis in Operations Management*,** Brandon-Jones and Slack, Pearson

ASSIGNED READINGS. The readings refer to the reference textbook and are required knowledge for all examinations. If you read the chapters prior to the class concerned, you will be better prepared to understand the course material and topics that will be discussed in class.

EVALUATIONS:

The final grade will be determined as follows:

- 10% Class Participation, Engagement and Homework
- 30% Midterm Exam – Quantitative Analysis Test
- 30% Group Project – Storytelling and Oral Defense
- 30% Final Exam – Case Exercise

Presence in class is mandatory. More than 2 absences will lead to a failing grade.

GRADING CRITERIA:

Grades will be based on the standard ABS Grading Rubrics available on beecome.

COURSE SCHEDULE:

Dates	Homework	Session Content
Session 1 22 Sept	BUY THE BOOK	Introduction to: Group Project Assignment & Requirement
Session 2 29 Sept	Workshop 1	Predictive Techniques: • Time Series Analysis • Linear Regression Analysis
Session 3 6 Oct	Workshop 2	Evaluative Techniques: • Break-even Analysis • Weighted Score Method
Session 4 13 Oct	Workshop 3	Descriptive Techniques: • Productivity • Value-added Throughput Efficiency
Session 5 20 Oct	Workshop 4	Descriptive Techniques: • Measuring Capacity • Overall Equipment Effectiveness
Session 6 27 Oct	MIDTERM EXAM	Quantitative Analysis Test
Session 7 3 Nov	Workshop 5	Descriptive Techniques: • Little's Law • Balancing Loss

Session 8 10 Nov	Workshop 6	Descriptive Techniques: • Earning Before Interest and Tax • Net Present Value
Session 9 17 Nov	Workshop 7	Optimizing Techniques: • Optimizing Location • Optimizing Inventory
Session 10 24 Nov	Workshop 8	Optimizing Techniques: • Linear Programming • Transportation Method
Session 11 8 Dec	GROUP PROJECT	Oral Presentations: • Operations Strategy • Operation Performance • Supply Network Design
Session 12 15 Dec	FINAL EXAM	Quantitative Analysis Test

The schedule of Final Exams will be confirmed and published by 31 October 2020. The last day of the semester is 18 December 2020. DO NOT PLAN ANY TRAVEL BEFORE THIS DATE AS THERE ARE NO MAKE-UP EXAMS.