



# HFTM\*3120 Service Operations Analysis (0.5) F2014

## General Course Information

**Instructor:** J.E. (Joe) Barth  
*Email* jbarth@uoguelph.ca  
*Office Location* MACS124  
*Office Hours* Wednesdays 9:00AM -11:00AM, or by appointment  
*Department/School* School of Hospitality Food and Tourism Management

**Class Schedule:** Tuesday and Thursdays, 11:30 AM-12:50 PM, MINS103.

<u>Week of:</u>	<u>Topic</u>
Sep. 4 <sup>th</sup>	Introduction
Sep. 9/11:	Understanding Service Operations Stages of Economic Development Characteristics of the Service Product The Service Package Service Delivery
Sep. 16/18:	Service Strategy and Design Strategic Positioning Service Design Service Blueprinting Work Study Methods
Sep. 23/25:	Facility Design Supporting Facility and Process Flows Process Analysis Product Layout and the Work Allocation Problem Process Layout and the Relative Location Problem
<b>Thursday Sep 30:</b>	<b>Midterm examination (30%), 80 minutes, in class</b>
Oct. 2/7:	Facility Location Facility Location Techniques GIS Systems: Benjamin's Bagels Huff Model of Retail Location
Oct. 9/16:	Delivering Services Clarke-Wright Algorithm Routing Problems
<b>Oct, 14</b>	<b>Fall Study Break day... NO CLASSES</b>

<u>Week of:</u>	<u>Topic</u>
Oct. 21/23:	Forecasting Average, Moving Average Exponential Smoothing
<b>Tuesday Oct. 28:</b>	<b>Midterm examination (30%), 80 minutes, in class</b>
<b>Thursday Oct. 30:</b>	<b>Last Day to Drop</b>
Oct. 30/Nov. 4	Managing Capacity and Demand Overbooking and Demand Payoff tables Critical Fractile Technique
Nov. 6/ 11:	Service Quality Gap Model SERVQUAL QFD Service Recovery
Nov. 13/18:	Project Management CPM PERT
Nov. 20/25.	Yield Management The Yield Management Analyst
Nov. 27	Review
<b>Friday, Dec. 12:</b>	<b>FINAL EXAM (40%) 7:00 – 9:00 PM, room TBA</b>

**Pre-requisites:** ECON\*2740 or STAT\*2060

**Restrictions:** FARE\*3310. Registration in BCOMM:HAFA, BCOMM:HAFA:C or BCOMM:TMGT.

## Course Description

This course presents an analysis of operations management in service industries with the aim of improving productivity and service delivery. Specific areas to be studied include the nature of productivity, the use of work study methods, the significance of statistical concepts and the application of operations research techniques.

## Course Learning Outcomes

To understand services and the service economy, productivity, and some techniques used to design service delivery systems, facility layouts, location selection, quality and optimize revenue.

**Upon successfully completing this course, you will be able to:**

## Knowledge and Understanding:

1. *The evolution of the Service economy and trend for Services in the future*
2. *Characteristics of services and products*
3. *Different approaches to the design and delivery of services*
4. *Optimised Design of service delivery systems*
5. *Know the role of algorithms in optimised design of service*
6. *Understand the Service Gap model as used in the analysis and design of services*
7. *Understand the elements of Revenue (Yield) Management*
8. *Develop useful numerical skills used by operations managers*

## Discipline/Professional and Transferable Skills:

9. Be able to balance and assembly line
10. Be able to optimise the layout of a service facility
11. Be able to find the optimal location of a fixed service facility
12. Be able to find the shortest route for the delivery of services to consumers
13. Apply SERVQUAL and House of Quality techniques to service design
14. Be able to use numerical methods to forecast demand for services
15. Use critical fractile technique to determine optimal overbooking policy, inventory levels and pricing
16. Use CPM and PERT to manage projects and estimate stochastic and probabilistic completion times

## Course Assessment

			<b>Associated Learning Outcomes</b>	<b>Due Date/ location</b>
<b>Assessment 1:</b>	30%	Individual multiple choice and short answer midterm examination	As above	Sep.30, 2014 In class
<b>Assessment 2:</b>	30%	Individual multiple choice and short answer midterm examination	As above	Oct.28, 2014 In class
<b>Assessment 3:</b>	40%	Individual multiple choice and short answer final exam	As above	Dec.12, 2014 7 – 9 PM Location TBA
<b>Total</b>	<b>100%</b>			

## Teaching and Learning Practices (*as appropriate*)

**Lectures** Lecture notes are posted on the D2L site for this course. Students are advised to download and print lecture notes from the D2L site and bring them to class. It is further advisable to prepare for class by reading the notes and working through the examples. Practice problems (ungraded) are provided weekly, and are similar to problems that will be on the examinations. Students who solve the practice problems will find the exams easy.

## Course Resources

### Required Texts:

There is no text book for this course. Lecture materials (PowerPoint slides) will be posted on D2L before each lecture. It is recommended that students print a copy of the lecture slides before each class and annotate the slides with additional materials as necessary.

### Other Resources:

Example problems are provided to assist with mastering the material and studying for exams. Problems on the exams will be very similar to those done in class or provided for practice. Practice problems are posted on the D2L site.

## Course Policies

### Grading Policies

Midterm and final examinations are not returned. Students may review their examinations with the instructor by appointment or during office hours for information and accuracy.

Grades are posted on the D2L site within a week of the writing the exam. Examinations are non-cumulative.

### Course Policy on Examinations:

No computers, phones or other electronic devices are permitted. Students may use a basic (non-programmable) calculator, pencil, eraser and a memory aid during exams. The memory aid consists of ink-on-paper notes (no paste-ups) on both sides of a single sheet of 8.5" X 11" paper.

### Course Policy regarding use of electronic devices and recording of lectures

Students are permitted to record my lectures (including labs), and share them freely along with any of the material posted on the D2L website for this course.

Classroom chatter is disrespectful to the instructor, and interferes with other students listening and participation. Students are encouraged to use email, twitter and other social media in class as an alternative to chatter during lectures and labs.

## University Policies

### Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

### Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes

academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08...>

## **Accessibility**

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email [csd@uoguelph.ca](mailto:csd@uoguelph.ca) or see the website: <http://www.csd.uoguelph.ca/csd/>

## **Course Evaluation Information**

Please refer to the [Course and Instructor Evaluation Website](#)

## **Drop date**

The last date to drop one-semester courses, without academic penalty, is **Thursday, Oct. 30, 2014**. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08>