



## Course Outline 2017

### **BUSADMIN 776: Operations and Supply Chain Management (15 points)**

#### **Quarter 3 (1176)**

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#### **Course Prescription**

Focuses on the development of important managerial skills needed to ensure the continuing effective contribution of an enterprise's productive processes and information systems to its competitive position and performance. Emphasises learning about the complex operations and infrastructure required for (1) product development and manufacture and (2) service design and delivery.

#### **Programme and Course Advice**

Prerequisite: BUSADMIN 773

Restriction: BUSADMIN 766, OPSMAN 703

#### **Goals of the Course**

Operations and Supply Chain Management deals with the processes through which organisations create and distribute products and services (outputs), utilising resources including labour, materials, equipment, capital, information, and technology (inputs). These processes must be designed, controlled, and improved to meet a variety of performance objectives, taking into account constraints and uncertainty in the internal and external environment.

The goals of the course are for students to be able to:

- understand and analyse the role of operations and supply chain management – in manufacturing and services;
- understand key trade-offs involved in operations and supply chain management and how they relate to an organisation's strategy and competitive position; and
- utilise key concepts, models, and tools to formulate and justify recommendations to improve operations and supply chain processes.

#### **Learning Outcomes**

By the end of this course, it is expected that the student will be able to:

1. explain the key concepts of operations strategy and justify how operations and supply chain management can be used to improve the competitive position of manufacturing and service organisations;
2. identify and analyse methods to match capacity and demand of products and services to improve performance - particularly in the face of uncertainty;
3. generate and critique methods and implementation of quality management and process improvement - using concepts such as lean thinking and six sigma;
4. identify supply chain and inventory management issues and provide conceptual (methods and ideas) and analytical (modelling) approaches to deal with them effectively (e.g., reducing working capital requirements and/or improving customer service);
5. articulate important linkages between operations and supply chain management and other areas of the firm: in particular human resources, marketing, and finance.

## **Content Outline**

Session 1	Introduction, Frameworks and Operations Strategy
Session 2	Quality Management and Process Management
Session 3	Capacity and Constraint Management. Lean Operations and Just-in-Time
Session 4	Demand Management and Inventory Management
Session 5	Supply Chain Management and Course Review

## **Learning and Teaching**

The class will meet in 260-325 from 9am-3pm on three Saturdays and from 1pm-7pm on two Fridays. Class time will be used for a combination of lectures and applied discussions of case studies and exercises. In addition to attending classes, students should be prepared to spend around six hours per week on activities related to this course. These activities include carrying out the required readings and assignments, viewing video material, participating in the simulations, and preparing for the exam. Note that numerous examples (mostly with model answers) from previous assignment and exams, and recorded worked solutions are provided on CANVAS. There will also be a mock test available half way through the course.

Through linked lectures, cases, videos, exercises and readings, the course will show how operations in manufacturing and services should establish strategy and manage resources and processes along with supply chain interactions. By utilising frameworks and tools and thinking critically and creatively, operations can solve practical problems and generate innovative ideas to establish valuable organizational capabilities (including those providing sustainable competitive advantage) that are aligned with business strategy, and integrated with marketing, people, information systems, and finance.

A variety of instructional methods will be employed, including lecture, case discussion, worked examples, simulations, and video (some for a “flipped classroom”). The course content presents both practice (from case studies and examples in class) and contemporary research (primarily from journal articles) in Operations Management and closely-related fields. There are four cases in the course representing a variety of industries and geographical focus.

It is essential to have read and reflected on the prescribed material before each session to ensure class discussion is well informed and productive.

Student feedback will be sought throughout the course – informally, via evaluation, and student representatives. I also welcome questions you may have after any session. Where appropriate we will answer these for the whole class in a subsequent session, and the best ones will be recognized as a contribution to the class discussion.

I endeavour to provide feedback on all submissions/tests within one week at the most. This feedback should prove helpful for subsequent assessment. I am happy to correspond via e-mail, phone, skype or in person.

## Teaching Staff

### David Robb

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## Learning Resources

The following text is **optional**: Cachon, G., and Terwiesch, C. (2013) Matching Supply with Demand: An Introduction to Operations Management (3rd Ed). Irwin - McGraw Hill: New York (ISBN 978-0-07-352520-4). Digital copies are available for purchase or rent at amazon.com, or for purchase from <http://www.mheducation.com.au/9781308166483-aus-cust-ebook-matching-supply-with-demand>. Paperback copies are available for around NZ\$80 with free shipping from <http://www.bookdepository.com/Matching-Supply-with-Demand-Introduction-Operations-Management-Gerard-Cachon/9780071326223>.

There are also copies in the General and Engineering Libraries as well as a short loan (3 day) copy in the Kate Edgar Information Commons. It will be helpful to get you "up to speed" before the classes, and to provide greater detail to improve understanding.

Cases, articles, and chapters listed in the Detailed Course Schedule provide fundamentals, applications, illustrations, and extensions. The case study questions (see CANVAS) should be contemplated before the appropriate class. I recommend that, for each chapter and journal article, you record (e.g., on a single sheet of paper) the key issues, features (positive and negative), and perhaps a question you would like answered in class.

As a reference source you may like to refer to the APICS Operations Management Body of Knowledge (free download at [www.apics.org/ombok](http://www.apics.org/ombok)) or the glossary at <http://www.lindo.com/library/glossary.pdf>. For some good discussion on current topics in operations management take a look at [www.operationsroom.wordpress.com](http://www.operationsroom.wordpress.com) and <http://www.oprules.com/>. There is a list of some good Operations Management blogs at [http://www.poms.org/om\\_blogs/](http://www.poms.org/om_blogs/).

Information on assignments, copies of lecture slides, case studies, sample questions, worked examples, and and course readings will be distributed electronically on CANVAS.

## Assessment

The broad relationship between these assessments and the course learning outcomes is as follows:

Learning Outcome	Individual Assignment	Group Case	Group Simulation	Final Exam
1	X	X	X	X
2		X	X	X
3				X
4			X	X
5			X	X

Assessment Type	Final Grade Weight %	Exact Time/Date	Conditions	Duration
Assignment	15%	9pm Monday July 10	Individual	-
Case	12.5%	9pm Monday Jul 24	Group	-
Simulation	12.5%	7pm Monday Aug 14	Group	2 hours
Final Exam (managed by Examination Centre)	60%	Saturday September 02 2017 (to be confirmed by the Examination Centre)	Individual; Open Book	2 hours
Total	100 %			

### Individual Assignment (15%)

One Individual Assignment applying and reflecting on the material in the first two classes. To be submitted on CANVAS.

### Group case (12.5%)

Each group should have 4 members. Your submission answering the case questions is to be submitted on CANVAS.

### Group Simulation (12.5%)

The Littlefield Labs simulation will be run on **Monday** evening August 14 (Week 9). In the days beforehand your group should meet to discuss your strategy. Further details will be provided on CANVAS. Your grade will be comprised of two portions: (i) a document answering some questions about your team's plan/strategy (to be submitted on CANVAS before the simulation runs) [5%], and your team's final cash position [7.5%].

### Final exam (60%)

The final exam is a 2 hour open book exam at the end of Week 11. It will cover material throughout the course, and include application and integration of concepts. You may bring your notes, documents posted on CANVAS, and the textbook (annotations allowed). You should bring a calculator (but it may not have text storage capability). Examinable material includes all material covered in class (including cases), along with assigned readings, cases, and coursework. No devices capable of any form of communication (this includes cell phones) are permitted in the tests.

## Detailed Course Schedule

	Date	Topic	Required Readings, cases, and videos <sup>1</sup>	Optional Text reading <sup>2</sup>
1	July 01 (Sat)	Introduction, Frameworks, and Operations Strategy	Laseter (2009) PWC (2015) Case: Southwest Airlines (2013)	1.1
2	Jul 14 (Fri)	Quality Management and Process Management	Jacobs and Chase (2013): pp.304-317 Case: Chef Davide Oldani and Ristorante D'O (2013) V1, V2 Case: Noram Foods	10.1-10.5, 10.9
3	Jul 29 (Sat)	Capacity and Constraint Management  Lean Operations and Just-in-Time	8.1-8.6, 8.11-8.12 (Cachon and Terwiesch) V3, V4, V5, V6, V7 Case: Goulds Fine Foods Case: Breakfast at the Paramount (2017)  Anon (2015) Duncan and Ritter (2014)	2.2, 2.3 3.1-3.5 9.1  7.1-7.5, 11.1-11.10
4	Aug 11 (Fri)	Demand and Inventory Management	Video on Demand Management V8, V9 Robb (2017) Group Simulation instructions	2.4,2.5 7.6,7.7 12.1-12.7 14.1-14.10
	Aug 14 (Mon)	Group Simulation	Littlefield Labs Simulation will run from 7:10-9:00pm	
5	Aug 26 (Sat)	Supply Chain Management and Course Review	Case: Zara: The World's largest fashion retailer (2015) e-beer game instructions (RLT version)	17.1-17.2
	Sep 02 (Sat)	Final Exam (2 hours)		

<sup>1</sup> Must be read (or watched—Vx are 10 minute videos) prior to the session indicated.

<sup>2</sup> Cachon and Terwiesch (2013). Recommended to be read prior to the session indicated.

## Readings

- ANON 2015. Toyota Reinvents the Factory. Autocar.
- BUELL, R., 2017, Breakfast at the Paramount, Boston, MA: Harvard Business Publishing.
- CACHON, G. P. & TERWIESCH, C. 2013. Matching Supply with Demand: An Introduction to Operations Management, New York, McGraw-Hill Irwin.
- DUNCAN, E. & RITTER, R. 2014. Next frontiers for lean. McKinsey Quarterly.
- FERDOWS, K., J. A. D. MACHUCA, et al. 2015. Zara: The World's Largest Fashion Retailer, McDonough School, Georgetown University, University of Seville, and University of Bath School of Management.
- INKPEN, A., TAN, C., DEGROOT, V., EDENS, W., MASHRU, J., PATIL, S. & WAGNER, A. 2013. Southwest Airlines. Thunderbird School of Global Management.
- JACOBS, F. R. & CHASE, R. B. 2013. Operations and Supply Management: The Core, New York, McGraw-Hill.
- KUMAR, S. & WOOD, S. 2009. Managing a Short Product Life Cycle at Littlefield Labs. Stanford: Stanford Graduate School of Business.
- LASETER, T. M. 2009. An Essential Step for Corporate Strategy. *strategy+business*, 57.
- LEENDERS, M.R. and WALSH, J. 1998. Noram Foods, London, Ontario, Canada, Ivey Business Publishing.
- PISANO, G. P., DI FIORE, A., CORSI, E. & FARRI, E. 2013. Chef Davide Oldani and Ristorante D'O. Boston, MA: Harvard Business Publishing.
- PWC 2015. Reimagining Operations: PwC's 2015 Global Operations Survey.
- ROBB, D. J. 2017. Setting the Reorder Point using Business Intelligence

## Cheating and Plagiarism

The University of Auckland regards cheating as a serious academic offence.

Plagiarism is a form of cheating. In coursework assignments submitted for marking, plagiarism can occur if you use the work and ideas of others without explicit acknowledgment. Work can be plagiarised from many sources, including books, journal articles, the internet, and other students' assignments. A student's assessed work may be reviewed against electronic source material using computerised detection mechanisms. Upon reasonable request, students may be required to provide an electronic version of their work for computerised review.

The way of avoiding plagiarism is to reference your work properly. If you are in doubt about how to reference properly, ask someone – your lecturers, tutors and the Student Learning Centre are good places to start. Please refer to the following website for further information about academic referencing: [www.cite.auckland.ac.nz/](http://www.cite.auckland.ac.nz/)

The document *Guidelines: Conduct of Coursework* provides further advice on how to avoid plagiarism. It can be found at: [www.business.auckland.ac.nz/conductcoursework](http://www.business.auckland.ac.nz/conductcoursework)

The penalties for plagiarism can be severe, including losing some or all of the marks for the assignment. Major offences can be sent to the University's Discipline Committee, where further penalties can be imposed.

While you are encouraged to improve your coursework writing skills and are permitted to seek assistance from third parties you are advised that there are important limits on the amount and type of assistance that can be given to you in completing your assignments, including group work. Third parties include fellow students, reading groups, friends, parents, SLC tutors, and paid-for professional editing services.

There is a set of guidelines which clearly indicates the type of advice and assistance that can be given. If you are seeking the assistance of any third party you are required to give a copy of the guidelines to the person prior to them helping or assisting you.

You are also required to only seek and accept help using a printed version of your work, not an electronic version. You must keep a copy of this printed version and produce it if required.

A copy of the guidelines is available at:

[www.business.auckland.ac.nz/thirdpartyassistance](http://www.business.auckland.ac.nz/thirdpartyassistance)

## **HELP WITH ACADEMIC REFERENCING**

Acknowledgement of sources is an important aspect of academic writing. The University's Referen@ite website [www.cite.auckland.ac.nz](http://www.cite.auckland.ac.nz) provides students with a one-stop online resource for academic referencing needs. Referen@ite explains the essentials of referencing and how to avoid plagiarism. It also includes practical tools to help students reference correctly, use references effectively in writing, and gives fast access to some major reference formats with examples.

## **INCLUSIVE LEARNING**

Students are urged to discuss privately any impairment-related requirements face- to-face and/or in written form with the course convenor/lecturer and/or tutor.

## **STUDENT FEEDBACK**

### **Formative feedback surveys**

During the early part of the quarter (usually Week 3 or 4), short feedback surveys are administered to all students to get a snapshot of how they are coping with their new courses. This qualitative data, which is administered, collected and collated by the Programme Office, is designed as an 'early warning' system of any significant issues with the course that might need addressing quickly.

Lecturers are asked to provide a brief report to the Director GSM MBA on key items identified and proposed actions. Lecturers are also asked to provide a verbal report to the class, proposing any solutions as appropriate.

### **Course and teaching evaluations**

The University of Auckland evaluates the quality of teaching and of courses by using the the Summative Evaluation Tool, or SET. Summative evaluation is formal, summative evaluation of teaching undertaken according to University policy and is conducted at the end of a semester/quarter through the use of the formal University SET instruments. Summative evaluation is used by teachers to reflect on their teaching practice, and is also used by the University for quality assurance of teaching and courses.

## **In the Event of an Unexpected Disruption**

We undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. In the event of a disruption, the University and your course coordinators will make every effort to provide you with up to date information via canvas and the university web site.