

Course Outline

Program

Fall 2022

BUS 296 E, Operations Management

3 credits, 3 hours per week

This course examines the fundamental decisions of operations management for manufacturing and service organizations. Major operational design and management decisions will be analyzed and evaluated. Integrating the organization's mission and competitive strategy is key in ensuring the goal of increased productivity.

Prerequisites: BUS 110 and BUS 191

Recommended: BUS 111

Instructor

Name Jake Pavlovic Phone Number 403-918-7858

Email jake.pavlovic@keyano.ca

Hours of Instruction

Days	Time	Location
Thursday	6:00 pm – 8:50 pm	Online via Zoom

Consultation Hours as required

Days	Time	Location
Friday	3:00 pm – 4:30 pm	Online via Teams

Required Resources

OPERATIONS MANAGEMENT, SEVENTH CANADIAN EDITION (2021)

By: William Stevenson, Mehran Hojati, James Cao, Hydeh Mottaghi and Behrouz Bakhtiari McGraw-Hill Ryerson. ISBN-13: 978-1-26-032687-1

Access code for the e-book is available at the Keyano Bookstore.

Course Outcomes

Upon successful completion of the course, the student shall be able to:

1. Analyze the strategic role encompassed in product, process and service design in an organization's ability to achieve its goals.

The following concepts, skills, and issues are used to support this Outcome:

- Evaluate the role played by design in the areas of customer satisfaction, product and service quality as well as production costs.
- Differentiate between product design and service design and describe the design process.
- Identify the process choices.
- 2. Appraise capacity planning, facility location and layout, job design and operations technology.

The following concepts, skills, and issues are used to support this Outcome:

- Explain the main types of facilities layouts.
- Analyze why location decisions are important.
- Prioritize the criteria that guide decision makers in location decisions.
- Explain the importance of work design, behavioral approaches to job design and learning curves
- 3. Analyze an operation from a total quality management perspective.

The following concepts, skills, and issues are used to support this Outcome:

- Recognize the different perceptions and definitions of quality.
- Define "total quality management" and describe the major components of quality management programs.
- Appraise the four classifications of "costs of quality" and describe the effect that each has on the other.
- Identify key dimensions and measures of quality.
- 4. Predict, plan, implement, control and guide the operations management system.

The following concepts, skills, and issues are used to support this Outcome:

- Identify prediction and forecasting techniques and their advantages and disadvantages.
- Describe alternative project planning tools.
- Define the meaning and scope of aggregate planning.
- Analyze the objectives of the purchasing and materials management functions.
- Describe the nature and importance of inventories.
- Evaluate the benefits of "just-in-time" (JIT) production system.
- Analyze what is involved in good scheduling.

Evaluation

Component	Weights
Assignments	45%
Midterm Exam*	25%
Final Exam*	30%
Total	100%

Note:

- 1. Working in groups will provide each student the opportunity to develop team skills, improve communication skills and leverage personal experiences to contribute to group assignments. For collaborative exercises, one grade will be provided to every group member based on the exercise deliverables.
- 2. Assignments will take various formats, including but not limited to case studies, mini cases, short answer questions, essay questions and multiple-choice quiz.
- 3. All assignments must be completed during the allotted period. If you have a medical note alternate arrangements will be made.
- 4. The midterm examination and the final examination will be written individually by each student.

*In this assessment category, only students who fulfil the following criteria can obtain full or partial credit. Students must:

- be present in the class during the time of the quiz or activity;
- contribute in an active and significant way to ongoing class discussions; and
- be prepared, demonstrating that they can relate concepts to book chapters, readings and cases.

Grading System

Descriptor	Alpha Grade	4.0 Scale	Percent
	A+	4.0	> 93.9
Excellent	Α	4.0	87 – 93.9

	A-	3.7	80 – 86.9
	B+	3.3	77 – 79.9
Good	В	3.0	74 – 76.9
	B-	2.7	70 – 73.9
Satisfactory	C+	2.3	67 – 69.9
	С	2.0	64 – 66.9
	C-	1.7	60 – 63.9
Poor	D+	1.3	57 –59.9
Minimum Pass	D	1.0	50 – 56.9
Failure	F	0.0	< 50

The minimum standard for passing this course is a grade of D (50%).

Students must achieve an average of 50% on the midterm and the final exam in order to pass the course and an overall average in the course of 50% (D).

See the credit calendar for more information.

Proposed Schedule

BUS 296E – Operations Management		
Tentative Schedule		
Date	Tuesday	Thursday
Week 1 Sept 1	Class 1: Introduction	Class 2: Chapter 1 Introduction to Operations Management
Week 2 Sept 8	Class 3: Chapter 2 Competitiveness, Strategic Planning, and Productivity	Class 4: Chapter 2 Competitiveness, Strategic Planning, and Productivity (Assignment 1)
Week 3 Sept 15	Class 5: Chapter 3 Demand Forecasting	Class 6: Chapter 3 Demand Forecasting (Assignment 2)
Week 4 Sept 22	Class 7: Chapter 4 Product and Service Design	Class 8: Chapter 4 Product and Service Design (Assignment 3)

Week 5	Class 9: Chapter 5	Class 10: Chapter 5	
Sept 29	Capacity Planning	Capacity Planning (Assignment 4)	
Week 6	Class 11: Chapter 6	Class 12: Chapter 6	
Oct 6	Process Design and Facility	Process Design and Facility Layout	
	Layout	(Assignment 5)	
Week 7	Class 13: Chapter 7	Class 14: Mid-term	
Oct 13	Work/Job Design		
Week 8	Class 15: Chapter 8	Class 16: Chapter 8	
Oct 20	Location Planning and Analysis	Location Planning and Analysis	
		(Assignment 6)	
Week 9	Class 17: Chapter 9	Class 18: Chapter 9	
Oct 27	Management of Quality	Management of Quality (Assignment	
		7)	
Week 10	Class 19: Chapter 11	Class 20: Chapter 12	
Nov 3	Inventory Management	Aggregate Operations Planning and	
		Master Scheduling	
Week 11	Class 21: Chapter 12	Remembrance Day – No Class	
Nov 10	Aggregate Operations Planning		
	and Master Scheduling		
	(Assignment 8)		
Week 12	Class 22: Chapter 14	Class 23: Chapter 14	
Nov 17	Just-in-Time and Lean Production	Just-in-Time and Lean Production	
		(Assignment 9)	
Week 13	Class 24: Chapter 15	Class 25: Chapter 15	
Nov 24	Supply Chain Management	Supply Chain Management	
Week 14	Class 26: Chapter 17	Class 27: Chapter 17	
Dec 1	Project Management	Project Management	
Final Exam (Date TBA)			

Please Note:

Date and time allotted to each topic is subject to change.

If you have any problems and questions, please do not hesitate to ask me for help!

IF I DON'T KNOW THAT YOU HAVE PROBLEMS, I CAN'T HELP FIX THEM!

Performance Requirements and Student Services

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the <u>Keyano College credit calendar</u>. The

Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own;
- The use of unauthorized aids in assignments or examinations (cheating);
- Collusion or the unauthorized collaboration with others in preparing work;
- The deliberate misrepresentation of qualifications;
- The willful distortion of results or data;
- Substitution in an examination by another person;
- Handing in the same unchanged work as submitted for another assignment; and
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work may not be graded until you show this signed certificate.

Specialized Supports

The Student Services Department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented through a model to respond to the restrictions in force at the time. In-person and virtual services will be offered. All Alberta Health Services guidelines will be followed for in-person appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30. The College is closed for statutory holidays. If you require support outside of regular business hours, please inform the support service team, and we will do our best to accommodate your needs.

Accessibility Services: provides accommodations for students with disabilities. Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility supports and to book an appointment, please contact accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Wellness Services: offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. Students may access services virtually and in-person.

Wellness Services welcomes students to participate in any of the group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual appointments can be made by emailing wellness.services@keyano.ca.

Library Services: provides students with research and information supports as they engage in their studies. Library staff are available to support you both online and in-person throughout the semester. For a detailed list of library supports and services, go to www.keyano.ca/library. For all inquiries, please email askthelibrary@keyano.ca or chat with us online.

Begin your research with the <u>Library's FIND page</u>. Search for information and sources for your assignments using the OneSearch, the Library's Catalogue, or by searching in a specific database selected from the <u>A-Z Database List</u>.

Individual support with us is available. For support with citations, research and other information needs, appointments can be booked using the online <u>Book A Librarian Calendar</u>. For support with Moodle, educational tools for assignments, Microsoft Office, Zoom, Teams and more, book an appointment using the online <u>Educational Technology Support Calendar</u>.

Research and subject guides are helpful resources when beginning your research, assignment, using new educational technology, or addressing other information needs. To view a subject or course-specific guide, check out the complete listing of online <u>Subject Guides</u>.

To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the <u>Research Help Library page</u>.

The Loanable Technology collection is available to support students in their learning pursuits, whether online, in person or both. Items available for borrowing include mobile projectors, webcams, noise-cancelling headphones, Chromebooks, and laptops. For an up-to-date list of technology available for borrowing as well as support available, go to the Library's Loanable Technology webpage.

Academic Success Centre: The Academic Success Centre is a learning space in the Clearwater Campus (CC-119) at Keyano College. Students can gather to share ideas, collaborate on projects, get new perspectives on learning from our Academic Content Specialists, or use the Centre's educational resources. The Academic Success Centre provides academic support services to students registered in credit programs at Keyano College in the form of individual tutoring, writing support groups, facilitated study groups, workshops, and study space. Services are **free** to Keyano students.

Academic Content Specialists are available in the areas of Math, Science, Human Services, and English/Humanities. This covers all courses offered at Keyano. The Academic Success Coach can also be found in the Academic Success Centre.

For the most up to date information on how to book a session, please view <u>the Keyano Academic Success Centre homepage</u>.

Academic Integrity: The goal of the Academic Success Centre is to foster a student's ability to learn effectively and independently. Students registered at Keyano College are welcome to drop by the Centre to visit with any of our Academic Content Specialists to discuss their academic concerns.

Availability: Monday to Friday: 8:30 a.m. – 4:30 p.m. Flexible times may be available upon request. Virtual and in-person sessions, please email to get in contact with our Academic Content Specialists. For the most up to date information on how to book a session, please view the <u>Academic Success Centre homepage</u>.

Academic Success Coach: offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano. Academic.success@keyano.ca is the best way to access resources during blended service

delivery. The Academic Success Coach is located in the Skill Centre in CC-119 at the Clearwater Campus.

E-Learning

Technology and internet will impact your online learning experience. It's important that you can watch an online video and other course materials, take online quizzes and participate in a live class with your instructor and other students. Live/virtual classes will be hosted in Microsoft Teams or Zoom.

For all course delivery types, you will access your course resources on Keyano's learning management system, <u>Moodle (iLearn)</u>. Login in using your <u>Keyano username and password</u>.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements.

Internet Speed

Minimum Internet speeds of 10 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home).

Check your internet speed with Fast.com.

System requirements:

Microsoft Windows	Apple
Minimum Requirements:	Minimum Requirements:
 A Windows 10 computer/laptop Minimum 4GB of RAM. 10GB+ available hard drive storage. 	A Macintosh (V10.14 and above) computer/laptop · Minimum 4GB of RAM. · 10GB+ available hard drive storage.
 Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. Microphone, webcam and speakers. A headset with a microphone is recommended. System updates must be regularly installed. 	 Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. Microphone, webcam and speakers. A headset with a microphone is recommended. System updates must be regularly installed. Anti-Virus / Anti-Malware software.
· Anti-Virus / Anti- Malware software	
Recommended Requirements · 8GB of RAM	Recommended Requirements 8GB of RAM
· A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you	· A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and
Chromebooks are not recommended as the browsers.	hey are not compatible with testing lockdown
A Microsoft Surface or iPad or iPad Pro ma	ay be possible alternatives in some program areas.

Specific Department Requirements:

Business and OA programs require Windows 10. Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for free using Keyano credentials by <u>clicking here</u>.

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus, no student is allowed to share, distribute, publish or sell course related content (instructor, or students) without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The <u>Academic Integrity Policy</u> provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.