



Syllabus

SCHOOL OF BUSINESS AND MANAGEMENT

BUS 320: Technology and Operations Management

5 Credits

Effective: Spring 2020/2021

Access to the Internet is required.

All written assignments must be in Microsoft-Word-compatible formats.

See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.

FACULTY

Faculty Name: FACULTY NAME

Contact Information: CONTACT INFORMATION

[INSTRUCTOR MAY INSERT PERSONAL MESSAGE IF DESIRED]

COURSE DESCRIPTION

“Efficiency is doing things right; effectiveness is doing the right things.” ~ Peter Drucker

“The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.” ~ Bill Gates

How can companies in a variety of industries from manufacturing to services implement their strategic plans successfully and transform this exemplary execution into a competitive advantage? How do firms such as Amazon make decisions under uncertainty related to cost, time, and quality to create customer value and compete? Concepts, tools, and techniques in “Technology and Operations Management” are the central themes in responses to the above questions.

Technology and Operations Management is focused on transforming inputs (e.g., materials, equipment, technology, and human resources) into outputs (e.g., goods, services, decisions and information) in an efficient and effective manner. Accordingly, this course is designed to help students gain an in-depth understanding of the key decision points, systems and processes, tools, and methods that facilitate the above transformation. Primary topics include developing operations strategy, manufacturing and service flows, supply chain processes, and technology management. The cohesive body of knowledge that is presented in this class constructs the foundation that students need for the effective planning, organizing, and controlling of the many value-creating activities of the firm (i.e., operations management). Furthermore, the materials covered within the Technology component provide an introduction to emerging technologies and relevant methods, such as Big Data Analytics, Artificial Intelligence, and the Internet of Things, which enable firms to analyze and improve their processes and to pinpoint problems or opportunities to create value.

<u>Developing Operations Strategies</u> How do organizations continually assess, adjust and redefine their strategy to win new customers, please existing ones and remain competitive in today's global marketplace?	<ul style="list-style-type: none">• Operations Management, Process, and Supply Chain Management
	<ul style="list-style-type: none">• Corporate Strategy, Performance, and Sustainability
	<ul style="list-style-type: none">• New Product and Service Design• Process Design and Capacity Management• Customer Relationships and Customer Service

<p style="text-align: center;"><u>Manufacturing and Service Flows</u></p> <p>How do organizations create highly flexible supply chain to respond rapidly to shifting demands and provide the right product with the right quantity at the right place with minimum cost?</p>	<ul style="list-style-type: none"> • Demand Management, Forecasting, and Aggregate Planning • Independent Demand Inventory Management Systems • Material Flow Analysis and Facility Layouts
	<ul style="list-style-type: none"> • Lean Systems • Managing Customer and Work Flows
	<ul style="list-style-type: none"> • Managing Information Flows: MRP and ERP Automating Process Management: How do organizations analyze large datasets using predictive modeling techniques to help pinpoint problems or opportunities to create value?
	<ul style="list-style-type: none"> • Managing Projects • Six Sigma Quality Management • Technology Management: Predict malfunctions based on prior performance.

<p style="text-align: center;"><u>Supply Chain Processes and Technology Management</u></p> <p>How do organizations apply Supply Chain Management tools and techniques to compete effectively in the market place?</p>	<ul style="list-style-type: none"> • Global Supply Management
	<ul style="list-style-type: none"> • Location, Logistics, and Product Returns
	<ul style="list-style-type: none"> • Integrating Processes along the Supply Chain

COURSE RESOURCES

Required and recommended resources to complete coursework and assignments are found on the course [Reading List](#). The reading list can be found under *Course Information* in Blackboard as well as from the library homepage (“Find Your Textbook” button).

Note: Required resources that must be purchased by the student are tagged “Purchase from a vendor of your choosing.” Required resources with a direct link, “Available through CityU Library”, are available electronically at no cost to students.

Students in Canada may purchase course resources from the [Canada Bookstore](#), and students outside the U.S. and Canada should contact their advisor or textbook coordinator for additional information.

CITYU LEARNING GOALS

This course supports the following City University learning goals:

- Critical thinking and information literacy

COURSE OUTCOMES

In this course, students will be able to:

- Explain the trade-offs in operations strategies of cost, quality, and customer service.
- Assess alignment between operations strategies and the firm's overall strategic plan.
- Explain how companies create operations strategies for competitive advantage.
- Discuss primary types of operations strategy decisions related to product design, process design, production control systems, facility location, facility layout, purchasing, logistics, quality, inventory, and customer service.
- Explain and evaluate integrating processes along the supply chain.
- Discuss potential contributions of technology to key phases and processes of operations management.
- Select and measure key performance indicators to assess operation's efficiency.

CORE CONCEPTS, KNOWLEDGE, AND SKILLS

- Corporate strategy
- Operations management
- Product design
- System design
- Forecasting
- Inventory management
- Lean systems
- Six Sigma
- Automating Process Management
- Supply Chain Management

OVERVIEW OF COURSE GRADING

The grades earned for the course will be derived using City University of Seattle's decimal grading system, based on the following:

<i>Overview of Required Assignments</i>	<i>% of Final Grade</i>
Instructor Determined Activities (including participation)	15%
Quizzes	45%
Case Study: Aligning Operations Strategies with the Firm's Overall Strategic Plan	40%
TOTAL	100%

SPECIFICS OF COURSE ASSIGNMENTS

The instructor will provide grading rubrics that will provide more detail as to how this assignment will be graded.

Instructor Determined Activities (Weekly Discussions)

Whether in class, online, or in a mixed mode setting, students will be graded on their participation in classroom discussions; their ability to present, explain, or defend alternative viewpoints; and the degree to which they have mastered the concepts and principles inherent in the study of business management.

Written work will be assessed not only on relevance to the subject presented, but also on adherence to good written form, APA style, and professional presentation. Your instructor may also choose to create additional activities to support learning in the classroom or online.

<i>Components</i>	<i>% of Grade</i>
Quality of Responses	40%
Quality of Responses	40%
Timeliness	20%
TOTAL	100%

Quizzes

Periodic assessments or quizzes will appear on the Course Schedule. The instructor will select assessment topics from the textbook chapters discussed during previous sessions. The purpose of these assessments is to allow students and the instructor to evaluate the achieved level of learning progress. This knowledge allows students to focus on those areas that need further clarification and enables the instructor to assist those students that need additional support.

<i>Components</i>	<i>% of Grade</i>
TOTAL	100%

Case Study: Aligning Operations Strategies with the Firm's Overall Strategic Plan



To learn about how you can **APPLY** the knowledge and skills required for this case study and create great value for your organization, visit: <http://www.usccg.com/results/>

Competitive advantage can be achieved when the operations function creates strategies that are aligned with the overall mission and strategy of the company. Operations strategies are thus the set of decisions made within the operations function to support the overall mission and strategy of the firm. For this project, the instructor will provide a case to students regarding a company and its operations. Students will need to determine how well the operations strategies align with the firm's strategic plan and make relevant recommendations based on their findings.

After identifying the firm's overall strategy (cost, quality, or customer service strategy), students will carefully discuss and analyze how each operations strategy contributes to the organizational strategy. Students must incorporate the following operations strategy categories into their analysis: product design, process design, production control system, facility location, facility layout, purchasing, logistics, quality, inventory, and customer service. In addition to analyzing each of the above categories, students must discuss how the firm takes advantage of technology to improve its operations and contribute to its overall strategy. Following the analysis and assessment, students will propose and justify recommendations to help the company enhance its competitive capacities towards meeting its strategic objectives. This paper should include at least one paragraph per operations strategy category, 1-2 paragraph(s) for the firm's utilization of technology, and 4-6 paragraphs for the overall analysis, recommendations, and justification

of proposed solutions. APA writing conventions should be followed with a minimum of five (5) sources referenced and cited.

<i>Components</i>	<i>% of Grade</i>
Executive Summary	5%
Assessing Alignment between Operations Strategies and the Firm's Strategic Plan	50%
Overall Analysis	10%
Recommendations and Justification	15%
Style including Structure, Flow, Grammar, and Spelling	10%
APA	10%
TOTAL	100%

COURSE POLICIES

Late Assignments

A critical aspect of management is to meet predefined deadlines. Therefore, all assignments are expected to be submitted when due. No late assignments are accepted. Life-situations do occur. When an issue arises coordinate with the instructor PRIOR TO the assignment's due date and the due date may be adjusted. It is in the best interest of the student to ensure that all assignments are submitted on time.

Participation

Class participation will be evaluated during class. Participation includes being prepared for class discussions and contributing meaningful content when appropriate. It also includes individual effort contributed to team projects.

Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

UNIVERSITY POLICIES

Students are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the [University Catalog](#) that is linked from the CityU Web site.

Antidiscrimination

City University of Seattle and its staff and faculty are committed to supporting our students. We value equity, diversity, and inclusion as a way of life as well as the educational opportunities it provides. CityU will not tolerate any form of discrimination based on race, color, ethnicity, sexual orientation, gender identification, socioeconomic status, or religious values. If you have experienced any discrimination based on any of the above, we encourage you to report this to the University. Please report this to your instructor. If you do not feel safe reporting this to your instructor, please report to the Provost or to the Vice President of Student Affairs

Non-Discrimination & Prohibition of Sexual Harassment

City University of Seattle adheres to all federal, state, and local civil rights laws prohibiting discrimination in employment and education. The University is committed to ensuring that the education environment is bounded by standards of mutual respect and safety and is free from discriminatory practices.

In the U.S., the University is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities do not discriminate on the basis of sex/gender. Sex include sex, sex stereotypes, gender identity, gender expression, sexual orientation, and pregnancy or parenting status. Sexual harassment, sexual assault, dating and domestic violence, and stalking are forms of sex discrimination, which are prohibited under Title IX and by City University of Seattle policy. City University of Seattle also prohibits retaliation against any person opposing discrimination or participating in any discrimination investigation or complaint process internal or external to the institution. Questions regarding Title IX, including its application and/or concerns about noncompliance, should be directed to the Title IX Coordinator. For a complete copy of the policy or for more information, visit <https://my.cityu.edu/titleix> or contact the Title IX Coordinator.

In Canada, in compliance with the British Columbia Human Rights Code, the Alberta Human Rights Act, WorksafeBC, and the Workers' Compensation Board of Alberta, the University believes that its environment should at all times be supportive and respectful of the dignity and self-esteem of individuals. Discrimination, harassment and bullying conduct, whether through person to person behaviour or via electronic communications such as email or social media is not acceptable and will not be tolerated. As an educational institution, it is our responsibility to cultivate an environment of excellence, equity, mutual respect and to recognize the value and potential of every individual. The University will take all necessary steps to meet or exceed the requirements of the law to prevent discrimination, harassment and bullying. The Respectful Workplace Policy for the prevention of discrimination, harassment and bullying policy and procedure can be found at <https://www.cityu.edu/discover-cityu/about-cityu/> under the Policies section or at <https://www.cityuniversity.ca/about/>.

Religious Accommodations

City University of Seattle has a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The University's policy, including more information about how to request an accommodation, is available in the University Catalog and on the my.cityu.edu student portal. Accommodations must be requested by the 20% mark of this course (e.g. day 14 of a ten-week course, day 7 of a 5-week course) using the Religious Accommodations Request Form found on the student dashboard in the my.cityu.edu student portal.

Academic Integrity

Academic integrity in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. Students are responsible for understanding CityU's policy on academic integrity and adhering to its standards in meeting all course requirements. A complete

copy of this policy can be found in the [University Catalog](#) under *Student Rights and Responsibilities* on the page titled *Academic Integrity Policy*.

Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if they are present at any time during the class session. For online classes, a student has attended if they have posted or submitted an assignment. A complete copy of this policy can be in the [University Catalog](#) under *Student Rights and Responsibilities* on the page titled *Attendance*.

Final Assignment Due Date

Final assignments for each class at CityU must be due on or before the final date of the course as indicated in the university's course information system. Due dates that extend beyond the final date of the course may negatively impact tuition funding for students.

SUPPORT SERVICES

Disability Services Accommodations Statement

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Support Services to discuss accommodation requests and eligibility requirements. Please contact Disability Support Services at disability@cityu.edu or 206.239.4752 or visit the [Disability Support Services](#) page in the my.cityu.edu portal. Confidentiality will be observed in all inquiries. Once approved, information about academic accommodations will be shared with course instructors.

Library Services

CityU librarians are available to help students find the resources and information they need to succeed in this course. Contact a CityU librarian through the [Ask a Librarian](#) service, or access [library resources and services online](#), 24 hours a day, seven days a week.

Smarthinking Tutoring

CityU students have access to free online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at help@cityu.edu to request a user name and password.