



Operations Strategy
Fuqua School of Business
Duke University

Fall 1 2024 Syllabus

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Overview

In the best organizations, operations are carefully designed to align with, and enable, the competitive strategy of the firm. The long-term design and control of a firm's operations to achieve such alignment is referred to as its *operations strategy*. In this course, we will discuss how to analyze, evaluate, and design effective operations strategies. Key learnings from the course include:

- **Operational Performance Dimensions (OPDs).** Students will learn about the four core performance metrics of an operating system: cost, quality, flexibility, and speed. Students will practice comparing, contrasting, and benchmarking different operations strategies based on their performance along each of these dimensions using both quantitative and qualitative analysis. A key point of emphasis will be ensuring "alignment" between operational capabilities and the firm's competitive strategy along each of the OPDs.
- **The Scale, Source, and Scope Framework (3S).** Students will be able to discuss and evaluate the critical decisions made in the scale, source, and scope of a firm's operations, which in turn comprise a firm's operations strategy and generate a specific level of performance along each of the OPDs. In a multipart assignment, students will develop a three-year operations strategy plan for a firm using the 3S framework.
- **Operations Strategy in a Complex World.** Inspired by the new Daytime MBA core course "Leading Business in a Complex World," students will discuss how operations strategies must change for firms facing pressing global issues, and how the OPD and 3S frameworks can be adapted to incorporate these issues. Topics include how operations strategy is impacted by social responsibility and sustainability, resilience in the face supply risk and climate change, and technology and platform businesses.

The course is primarily case based, with a significant discussion component augmented with rigorous quantitative and qualitative analysis. A substantial part of the course is a team-based project analyzing the operations strategies of real organizations.

1. Background

1.1 Prerequisites

While there are no formal prerequisites for Fuqua students or exchange students at Fuqua, familiarity with the material from the core operations management course (including process analysis, queueing, inventory management, quality management, and lean production) is expected. Because all Fuqua students should either have taken the core course or been exempted from it, I expect all students to know and understand this material.

Any non-Fuqua students from Duke University that wish to take the course should be familiar with the topics listed above, either from taking a core operations management course at another institution or via self-study. For interested students, there are several popular Coursera courses on introductory operations management that could provide the necessary background information.

1.2 Fit with Operations Area Courses

The course builds on the quantitative tools and methodologies developed in the core operations management course. Compared to the core course, a key difference with this elective is the level of decision-making being addressed and the job title of the person making those decisions: while the core course focuses primarily on tactical decisions made by a manager, the operations strategy course focuses on strategic decisions made by a COO or similar level executive. As a result of this shift in focus, the course will consist of relatively more case-based analysis, compared to the more problem-based approach in the core course.

Compared to the elective on value chain innovation, we will develop fewer quantitative tools specific to supply chain contexts and discuss fewer elements of coordination between the firms in the value chain, and instead spend more time on discussion of high-level operational strategies applicable in both manufacturing and service settings, primarily centered on the operational activities of a single firm. Hence, this course is a complement to, but not a replacement for, the elective on value chain innovation.

1.3 Target Audience

In sum, this course is appropriate for any students who seek a deeper understanding of the link between operational decisions and overall firm strategy, including students with career interests in operations, supply chain management, consulting, strategy, general management, and entrepreneurship. Students with a further interest in the principles and practice of either manufacturing or supply chain operations are encouraged to take the elective on value chain innovation as a follow-up to this course.

2. Assignments and Grading

Grades will be based upon the following components weighted by the given percentages.

Component	Due Date	% of Grade
Attendance		10%
General Participation		10%
On Call Day		10%
Individual Assignment 1	Friday, September 20, 11:59 pm	15%
Individual Assignment 2	Friday, September 27, 11:59 pm	15%
Individual Assignment 3	Friday, October 4, 11:59 pm	15%
Team Project	Start of the final class session	15%
Team Evaluation		10%

2.1 Attendance & Fuqua Check-In App

A significant portion of learning in the course comes from participation in case discussions, and because of this, class attendance is required and comprises a significant portion of the course grade. Students must check in to every class using the Fuqua Check-In app or else report their absence via the app. Leaving class early or arriving late should also be reported via the app. For the purposes of this course, absences are tabulated as follows:

- Missing a class session entirely is one absence
- Missing part of a class session counts as a fractional absence equal to the percentage of the class missed (e.g., leaving halfway through class counts as 0.5 absences)
- Missing 15 minutes or less of a class session does not count as an absence

Recognizing that many students have unavoidable conflicts such as job interviews, all students receive 2 free unexcused absences, classes that can be missed for any reason without affecting the attendance score; additional absences will reduce the attendance grade, unless they are excused at the professor's discretion for medical reasons (e.g., illness such as COVID or urgent medical treatment) or genuine emergencies (e.g., personal or family emergency). The attendance score will be calculated using the following table:

Number of Unexcused Absences	Attendance Score (out of 10)
0, 1, 2	10
3	8
4	5
5	0
6 or more	Fail the Course

Excused absences do not count towards the totals in the above table. Note that 6 or more unexcused absences will result in failing the course. It is an Honor Code violation to intentionally

misreport or misrepresent attendance information, or to leave class early without recording this in the attendance app. The professor will verify attendance records with each student midway through the term and at the end of the term.

2.2 Participation & On Call Day

Successful class participation requires regular and positive contributions to case and class discussions. We will discuss a fairly large number of cases during the term. For all students to get the most out of each case discussion, it is necessary that everyone prepare each case before class and participate constructively in the discussion. Students are also encouraged to share their relevant work experience as part of class discussion.

Preparing to discuss a case means reading the case and performing the necessary analysis to assess the managerial issues and questions raised by the case. Students are expected to work through this analysis before class and be prepared to discuss their methods and conclusions in class. Students should draw on the concepts from prior class sessions and/or the assigned readings to analyze the managerial issues raised by the case. In the course outline below, discussion questions are provided for each case. Students should use these questions as a starting point and rough guide for analyzing the case.

The “On-Call Day” represents one day during the term for which you will sign up in advance to be on-call, i.e., a point person whom we will count on for answers to questions as necessary. **Each student will be expected to make a substantial contribution to class discussion on their On-Call Day.** These contributions should still be made voluntarily by the student, even on their On-Call Day, though in some cases I may ask on-call students direct questions.

Your performance on these days will be assessed and will result in 10% of your total course grade. In assessing performance during the on-call day, as with all class participation, it is the quality, not the quantity, of the contribution that matters. A sign-up spreadsheet for On-Call Days will be circulated via Canvas at the beginning of the term.

“General Participation” represents your class participation on the days you are not on-call. **You are expected to regularly participate in class discussion, even on days you are not on-call,** hence the equal weight placed on general participation and the on-call day. The On-Call Day is not intended to be a license to participate on only one day during the term; as such, failure to participate voluntarily during the rest of the quarter will result in a low General Participation grade.

2.3 Individual Assignments

There are three Individual Assignments. To foster learning from your peers, you may discuss your general approach to these assignments with your classmates. However, for these assignments, you must complete and submit your own analysis and write-up. Copying the write-

up or analysis of another student is not permitted. Please ask the professor if you have any questions about this policy.

2.4 Team Project

The course ends with a capstone team project, including presentations and write-ups, on operations strategies in innovative companies. Details on these projects and the team formation process will be shared during the term. Students will also be asked to submit team evaluations following the team project. These evaluations will allow you to assess the performance of each of your team members and will be included as a part of your overall course grade.

3. Honor Code and Collaboration Policy

The Fuqua School of Business Classroom Norms and Honor Code apply to all aspects of this course.

Collaboration. The nature of each assignment indicates the type of communication and consultation that is permitted. Work that is described as an individual effort is to be your work alone, without consultation or assistance from any other person, unless explicitly noted on the assignment. Work that is described as a team effort is to be your team's effort alone, without consultation or assistance from anyone who is not a member of your team. If you are uncertain about the nature of any assignment, please ask your professor. Failure to follow the collaboration rules for any assignment is a violation of the Honor Code.

External Resources. Each assignment describes in the instructions the types of resources that may be used. It is a violation of the Honor Code to use any resources (including references, websites, software, and generative AI tools such as ChatGPT) on an assignment that are not explicitly permitted. If you are uncertain whether a particular resource may be used on any assignment, please ask your professor.

4. Materials

There is no required textbook for the course, and all materials are contained in the course pack or distributed on Canvas.

All course materials, including slides, handouts, and assignments, are copyrighted and may not be distributed to anyone outside of the class without instructor permission.

Operations Strategy Outline

#	Date	Topic	Case or Activity
1	9/6	Introduction	AmazonFresh: Rekindling the Online Grocery Market (Case) Amazon Acquires Whole Foods (Case)
2	9/10	Operational Alignment	The Morrison Company (Case)
3	9/13	Scaling Strategy	Playa Dorada Tennis Club: Expansion Strategy (Case)
4	9/17	Sourcing Strategy	New Balance Athletic Shoe (Case)
5	9/20	Dual Sourcing	The Sourcing Game (Simulation) Individual Assignment 1 Due
6	9/24	Scope Strategy	Shouldice Hospital Ltd. (Case)
7	9/27	Expanding Scope	JetBlue Airways: Managing Growth (Case) Individual Assignment 2 Due
8	10/1	Operational Benchmarking	Inspiral: A Contrast in Operations Strategies (Case)
9	10/4	Responsibility and Operations Strategy	Global Sourcing at Nike (Case) Individual Assignment 3 Due
10	10/8	Resilience and Operations Strategy	Nissan's Response to the COVID-19 Pandemic (Case)
11	10/11	Platform Operations Strategy	Wayfair: Fast Furniture? (Case)
12	10/15	Presentations & Course Summary	Project Presentations (Team) Project Write-up Due (Team)