#### **USC MARSHALL SCHOOL OF BUSINESS**

### **OPERATIONS CONSULTING**

DSO 483 Syllabus (DRAFT Jan-1, 2023) Spring 2023

**Instructor:** Professor Vitaly Glozman

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Class Schedule: Tuesday and Thursday, 8:00 am – 9:50 am

Office hours: Tuesday and Thursday, 8:00 am – 9:50 am; or by request

# **Course Description and Learning Objectives**

### **Summary:**

The course covers operational issues and business decisions from the Operations Consulting perspective, including developing competitive advantage through operations, strategic planning, manufacturing capacity investments, distribution and logistics, process design and transformation. The students will develop an ability to identify and analyze issues in operations and link these to business strategy and industry dynamics.

The class includes student-teams performing projects for select companies, as well as lectures, case discussions, quantitative and qualitative methods, and guest speakers.

### **Learning Objectives:**

Upon successful completion, student will be able to:

- Define operations consulting and the relevant strategic operational areas
- > Evaluate end-to-end operations, from Product Launch and Planning through Manufacturing and in-Market Operations
- Identify, analyze, and fix issues in operations
- Perform outside-in Company Analysis and Benchmarking
- Develop strategies for creating competitive advantage through Operations, Strategic Planning, Solution Design, and Implementation
- Communicate complex deliverables through effective storylines and synthesis
- Apply skills needed to succeed in Consulting Firms
- Work as a consultant with a client company

### **Course Materials**

**Course Reader** – Containing cases that can be purchased from Harvard Business Online. To purchase the materials, go to <u>USC DSO483 - Operations Consulting | Harvard Business Publishing Education</u> and register / sign-in. The website will allow you to buy the cases on-line

Blackboard Files – additional articles and notes will be posted on the Blackboard

**Required Text Book** — Operations and Supply Chain Management — Essentials You Always Wanted to Know, by A. McDonough (2020, ISBN-10: 1-949395-24-3)

### **Suggested Text Book:**

- Business and Management Consulting Delivering an effective project, by Louise Wickham and Jeremy Wilcock (2020, 6<sup>th</sup> edition)
- Supply Chain Management Strategy, Planning, and Operations, by Sunil Chopra (2019, 7th edition)

# **Grading**

The grade in this course will be based on individual class participation, group assignments, and individual assignments. The assessments will be based on your understanding of the tools and concepts covered, your ability to integrate and apply those concepts in case studies and client projects, and your contribution to the learning experience of the class as follows:

### Individual:

Class Participation: 5%

■ Final Exam: 25%

### Group of Two Students (or Individual):

Short-Case Write-up, Assignments and Exercises: 20%

### **Groups of Four to Six Students:**

• Group Consulting Project (Analysis, Report, Presentations): 50%

### **Class Participation**

Class participation requires that you do the assigned readings, analyze the cases based on the questions given, and participate actively in class. The focus is on substantive comments based on good analysis rather than general comments that add little to the discussion and learning. If you are reluctant to talk in class but would like to show your preparation, please provide me with your analysis before class. Be prepared to defend your suggestions or solutions with thoughtful analysis! Guiding criteria for measuring effective class participation include:

• Is the student absent too many times? Is the participant a good listener?

- Are the points that are made relevant to the discussion? Are they linked to the comments of others?
- Is there a willingness to participate and bring new ideas?
- Do the comments show evidence of analysis of the topic or the case?
- Do the comments clarify or build upon the important aspects of earlier comments and lead to a clearer statement of the concepts being covered?

#### **Final Exam**

There will be a final exam that covers the materials we learn throughout the semester. The final exam is scheduled for **Wednesday**, **May 10<sup>th</sup>**, **8 am to 10 am**. Please take this into account when scheduling your trips! If there are extenuating circumstances that prevent you from taking an exam, you must discuss the reason with me before the time of the exam. You will not be given a make-up exam unless you obtain permission from me in advance. In addition, you must be able to document the extenuating circumstance. If you miss the exam due to a medical emergency that can be documented and verified, then a make-up exam will be given. Otherwise, a grade of zero will be given for the missed exam.

### **Case Write-ups**

We will be discussing several cases and articles. You should be prepared for class discussions and participate actively. For the individual or two-person submission, please prepare a concise write-up, answering the questions that will be provided with the assignment. As the objective of these short submissions is to ensure that you understand and prepare the case, no late submission will be accepted. If you are not able to attend the class, you can submit your assignment online through Blackboard before class.

### Assignments and Exercises – there will be several types of assignments, including:

- Company Profile: The outside-in analysis provides an important input to generate new business for consulting company and to comprehend the business context before starting a project. Consultants research the company-specific information, including industry trends, competitive position, business and operational strategy, and performance benchmarks vs. competitors. A company profile template will be provided to the students, and students will prepare a company profile report for a specific target company.
- Analytical and Visualization Tools Applications: The students will be provided with raw data and will be asked to link the data, conduct analysis, prepare summary tables, and choose the best ways to communicate and present the data. The tools that the students will be using may include Excel (with Pivot Tables), Tableau, and Visio

# **Group Consulting Projects**

The consulting project will give you the opportunity to deal with the details of a hands-on operations consulting project and developing your consulting skills. The list of consulting projects and companies will be available at the beginning of the course, and the students will be

assigned to teams, taking individual preferences into account. Each team will be responsible for organizing itself, and gathering further information about the company and the consulting project. This will involve live interactions with the client (mostly via online meetings as on-site visits will still be limited in Soring 2023). Each team will make an interim presentation and a presentation of the final deliverable, both in class and to the client. The reports will in PowerPoint format (plus any appendices). I will provide guidance to the projects throughout the semester.

The deliverables will be evaluated by the instructor and presented to the client. Your classmates will also provide their feedback. Team assignments provide a valuable learning experience – how to work effectively and efficiently in groups, learn from the others' experiences, communicate among team members, and present in front of a group. Although your team's grade depends on each member's effort, some students can be tempted to let others carry their load. To encourage all students to make maximum contributions to the team, students will be asked to grade each team member's contributions. Your group grades will be adjusted to the induvial grade based on the feedback about performance provided by other group members (I will post the instructions on Blackboard). If you do not submit your group assessment form, it is assumed that you have assigned a rating of 100% to all your group members.

# **Technical Support**

- For Blackboard support go to USC ITS Services Website or call USC ITS at 213.740.555
- For MarshallTALK (Zoom) support go to Zoom Support or call (888) 799-9666 ext. 2

#### **Statement on Academic Conduct**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the *SCampus*, the Student Guidebook (<u>USC SCampus</u>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <a href="USC Student Judicial Affairs and Community Standards">USC Student Judicial Affairs and Community Standards</a>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in <u>SCampus in Part B</u>, Section 11, "Behavior Violating University Standards". Other forms of academic dishonesty are equally unacceptable. See additional information in <u>SCampus</u> and <u>USC policies on scientific misconduct</u>.

### **Support Systems**

USC Emergency Information - <u>USC Emergency</u>

If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

*The Office of Disability Services and Programs – (213) 740-0776* 

<u>The Disability Services and Programs</u> (DSP) office provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with DSP each semester.

*Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call* 

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. Go to: <u>USC Engemann</u> Student Health Center Website

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. Go to: <u>National Suicide Prevention Lifeline</u>

Relationship & Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender-based harm. Go to: <u>USC Engemann RSVP Services</u>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the Website: <u>Sexual Assault Resource Center</u>

Office of Equity and Diversity (OED)/Title IX compliance – (213) 740-5086 Works with faculty, staff, visitors, applicants, and students around issues of protected class. Go to: Office of Equity and Diversity Website

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. Go to: <u>USC Student Affairs - Bias Assessment Response</u> and <u>Support</u>

# *Student Support & Advocacy – (213) 821-4710*

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. Go to: <u>USC Student Affairs - Student Support and Advocacy</u>

# Diversity at USC – <u>Diversity Matters</u>

Tabs for Events, Programs and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students

### American Language Institute - <u>ALI</u>

Students whose primary language is not English should check with the *American Language Institute*, which sponsors courses and workshops specifically for international graduate students.

### **Tentative Course Plan**

This course will start with an overview of Consulting industry and firms, business operations, and "life" of a consultant. In week 2 through week 8, we will focus on the life cycle of a consulting project, covering the activities required before a project starts, during the start-up period, in the early and the execution project phases, and when the project closes (these phases are underlined int the table below). Starting week 9, we will expand our focus to the consulting capabilities in specific Operations areas, including end-to-end ops integration, manufacturing, planning, sourcing, technologies, and ops strategies. The course will conclude with the discussions on business development and the final exam on May 10<sup>th</sup>.

A critical learning objects for this course is for the students to learn "hands-n" what it means to be an operations consultant. Throughout the course, the students will have an opportunity to organize into teams and work on a real consulting project with companies and clients. In addition, the class will welcome ~5 speakers from leading consulting firms who specialize in operations / strategy areas and cover several industries.

Note: Blue text represents Student-led client project activities; Green text represents current guest speaker slots

Week #	Session Dates	Agenda Topics (Tuesdays)	Agenda Topics (Thursdays)	Client Project and HW Assignments
1	Jan 10 & 12	<ul><li>Course Introduction</li><li>Consulting Industry Structure</li></ul>	<ul> <li>Operations and Ops Innovation Consulting</li> <li>Consultant's Day-in-the-Life</li> </ul>	
2	Jan 17 & 19	<ul> <li>Consulting Tools</li> <li>Student-led Consulting Projects: Introduction</li> </ul>	<ul> <li>Starting a Project: Outside-In Co's Analysis; Benchmarking</li> <li>Student-led Consulting Projects: Team Assignments</li> </ul>	Deloitte Case Study (due 1/18)
3	Jan 24 & 26	<ul> <li>Starting a Project (cont'd): Problem Definition, Scoping</li> </ul>	<ul><li>Starting a Project (cont'd): Project Chartering</li><li>Guest Speaker</li></ul>	Excel and Visualization Exercise (due 1/25)
4	Jan 31 & Feb 2	Starting a Project (cont'd):     Plan Development	<ul> <li>Starting a Project (cont'd):</li> <li>R&amp;R for Junior Consultants,</li> <li>Team Structuring</li> </ul>	Company Research and Client Kick-off Meeting (due 2/2)
5	Feb 7 & Feb 9	<ul> <li>Project Execution: Diagnostic and Recommendations, Decision Making</li> <li>Guest Speaker</li> </ul>	Student-Led Consulting     Projects: Project Plan Review	Draft Project Charter and Summary from Client Kick-off (due 2/8)
6	Feb 14 & Feb 16	Project Execution (cont'd):     Process Flow Development	<ul> <li>Project Execution (cont'd): Implementation Controls and Management</li> </ul>	Project Plan for Client Project (due 2/15)
7	Feb 21 & Feb 23	<ul> <li>Project Execution (cont'd):         Communication and         Stakeholder Management     </li> <li>Guest Speaker</li> </ul>	<ul> <li>Project Execution (cont'd): Addressing Issues and Risks</li> </ul>	
8	Feb 28 & Mar 2	<ul> <li>Project Closure: Transition Between Projects</li> <li>Managing Internal Project "Business"</li> </ul>	<ul> <li>Worksession – Student-led Consulting Projects Interim Deliverables</li> <li>Guest Speaker</li> </ul>	Process Flow Exercise (due 3/1)

Week #	Session Dates	Agenda Topics (Tuesdays)	Agenda Topics (Thursdays)	Client Project and HW Assignments			
9	Mar 7 & Mar 9	End to End Operations:     Integrated Supply Chain     Management	End to End Operations:     Applying SCOR Model for     Operations Consulting	Interim Project Progress Report for Client Project #1 (due 3/8)			
Spring Recess No Classes!							
10	Mar 21 & Mar 23	Manufacturing-focused     Consulting: Internal,     External, Network	Planning-focused Consulting:     Scheduling and Closed Loop     Balancing				
11	Mar 28 & Mar 30	Student-Led Consulting     Projects: Feedback and     Read-out of Interim Reviews	<ul> <li>Sourcing-focused Consulting: Supplier and Materials Management</li> <li>Guest Speaker</li> </ul>	Interim Project Progress Report for Client Project #2 (due 3/27)			
12	Apr 4 & Apr 6	Technology-focused     Consulting: IT, Platforms and     Al in Operations	Ops Strategy-focused     Consulting – ROI, Integrated     Business Planning	Nokia Case Study (due 4/5)			
13	Apr 11 & Apr 13	Student-Led Consulting Projects – Field Work	<ul><li>Proposing and Writing SOWs</li><li>Guest Speaker</li></ul>				
14	Apr 18 & Apr 20	Student-Led Consulting     Projects – Field Work	<ul><li>Business Development and Marketing</li><li>Review and Practice Final</li></ul>	Consulting Project Report Draft (due 4/17)			
15	Apr 25 & Apr 27	Student-Led Consulting     Projects – Final Presentation	Student-Led Consulting     Projects – Final Presentation	Consulting Project Report Final (due 4/24)			
	Final Exam: May 10, 8 am – 10 am						

### **Tentative Detailed Class Schedule**

#### WEEK 1 – JANUARY 10 AND JANUARY 12, 2023

# January 10: Course Introduction

- Class Introduction
- Consulting Industry Overview
- Firm Structures
- Expectations and Success Criteria for New Consultants

### January 12: Operations Consulting and Innovation

- Consulting Phases and Activities
- Operational Innovation vs. Operational Excellence
- Operations Scope and Link to Strategy

### **Readings and Assignments:**

- Complete Background Survey (due 1/11)
- Read "Deep Change How Operational Innovation Can Transform Your Company" (HBR Course Reader)

#### WEEK 2 - JANUARY 17 AND JANUARY 19, 2023

### **January 17: Consulting Tools and Operational Metrics**

- Consulting Tools
- Using Excel and Developing Effective Charts
- Client Projects for Student Teams: Companies and Projects Introduction

#### January 19: Starting a Consulting Project

- Deloitte Case Study Discussion
- Outside-in Company Analysis
- Baseline Benchmarking
- Client Projects for Student Teams: Project Team Assignments and Overall Approach

### **Readings and Assignments:**

- Read "Deloitte & Touche Consulting Group" case study (HBR Course Reader). Discussion question to be assigned in class
- HW Assignment: Provide answers to select questions based on Deloitte case study (due 1/18)

#### WEEK 3 – JANUARY 24 AND JANUARY 26, 2023

### January 24: Starting a Consulting Project (cont'd)

- Problem Hypothesis
- Problem Analysis Methodologies
- Project Scoping

#### January 26: Starting a Consulting Project (cont'd)

Guest Speaker

Developing Project Charter

### **Readings and Assignments:**

• <u>HW Assignment</u>: Complete Excel and Visualization exercise (due 1/25)

#### WEEK 4 – JANUARY 31 AND FEBRUARY 2, 2023

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### January 31: Starting a Consulting Project (cont'd)

- Components of a Project Plan
- Developing Project Plan

### February 2: Early Project Activities: Project Structure and Plan (cont'd)

- Roles & Responsibilities for Junior Consultants
- Team Structuring
- Project Governance and Decision Making

### **Reading and Assignments:**

• <u>HW Assignment:</u> Complete "mini" Outside-in Company Analysis for your Client or for alternative company based on provided template (due 2/2); Conduct client Kick-off meeting (due 2/2)

#### WEEK 5 - FEBRUARY 7 AND FEBRUARY 9, 2023

### **February 7: Project Execution**

- Guest Speaker
- Diagnostic Methods (qualitative and quantitative)
- Target Setting

#### **February 9: Focus on Student-led Client Projects**

Client Project for Student Teams: Project Plan Presentations by Each Team

### **Reading and Assignments:**

<u>Client Project Assignment:</u> Prepare Project Charter and summarize results form the kick-off meeting with your client (due 2/8)

### WEEK 6 - FEBRUARY 14 AND FEBRUARY 16, 2023

### February 14: Project Execution (cont'd)

- Execution Approaches, Rhythms, Tools
- Process Flows Development

### February 16: Project Execution (cont'd)

- Types and Creation of Deliverables
- Overview of Implementation Activities
- Project Execution Controls

### **Reading and Assignments:**

<u>Client Project Assignment:</u> Prepare project plan for the client project (due 2/15)

### February 21: Project Execution (cont'd)

- Guest Speaker
- Facilitation and Communication
- Stakeholder Management

### February 23: Project Execution (cont'd)

- Risk Management
- Problem Resolution and Escalation

### **Reading and Assignments:**

<u>Read</u> Frameworks for General Management and Operations Consulting (HBR Course Reader).
 Discussion questions to be assigned in class

#### WEEK 8 - FEBRUARY 28 AND MARCH 2, 2023

### **February 28: Project Closure**

- Completing Project
- Transitioning Between Projects
- Internal Project Management Budgets, Schedules, Resources

#### March 2: Client Project Work session

- Guest Speaker
- Work session on Interim Deliverables for Client Projects

### **Reading and Assignments:**

HW Assignment: Complete process flow exercise (due 3/1)

### WEEK 9 - MARCH 7 AND MARCH 9, 2023

# March 7: End to End Operations

- Supply Chain Integration
- Designing Supply Chain Material Flow View, Cycle Processes View, Push / Pull View
- Categories of Operations Projects

### March 9: End to End Operations (cont'd)

- SCOR Model Application in Consulting
- Cross-functional Projects

### **Reading and Assignments:**

- Read SCOR Metrics Implementation at Warner Home Video (Blackboard)
- HW Assignment: Develop interim project progress report #1 for the client project (due 3/8)

#### MARCH 14 AND MARCH 16, 2023

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#### Spring Break - No Class

#### WEEK 10 - MARCH 21 AND MARCH 23, 2023

#### March 21: Manufacturing-focused Consulting

- Internal Operations + MRP and Inventory Management
- External Manufacturing
- Quality Management

### March 23: Planning-focused Consulting

- Supply and Operations Planning (S&OP)
- Demand Planning and Scheduling

#### **Reading and Assignments:**

- Read A. McDonough Operations and Supply Chain Management: Ch. 2, Ch. 4, Ch. 5
- Read The Game Plan For Aligning Organization Sections 1, 3, 7, 8

### WEEK 11 - MARCH 28 AND MARCH 30, 2023

#### March 28: Review of Interim Client Project Deliverables

Client Projects for Student Teams – Team Read-outs of Interim Reports

### March 30: Sourcing-focused Consulting

- Guest Speaker
- Supplier Management
- Direct and Indirect Materials Management

### **Reading and Assignments:**

- Read A. McDonough Operations and Supply Chain Management: Ch. 3
- Client Project Assignment: Develop interim project progress report #2 for the client project (due 3/27)

### WEEK 12 - APRIL 4 AND APRIL 6, 2023

### **April 4: Technology-focused Consulting**

- Enabling Technologies for Operations
- Integration of AI and Machine Learning

### **April 6: Ops Strategy-focused Consulting**

- Long Range and Integrated Business Planning
- Organizational Restructuring

### Reading and Assignments:

- Read A. McDonough Operations and Supply Chain Management: Ch. 7
- Read "The Chairman of Nokia on Ensuring Every Employee Has a Basic Understanding of Machine Learning - Including Him" (HBR Course Reader)
- HW Assignment: Provide answers to select questions based on Nokia Case Study (due 4/5)

### **April 11: Consulting Project Field Work**

Student-Led Consulting Projects – Field Work

### **April 13: Consulting Business Development**

- Guest Speaker
- Developing Proposals and SOWs

### WEEK 14 - APRIL 18 AND APRIL 20, 2023

### **April 18: Consulting Project Field or in-Class Work**

Student-Led Consulting Projects Work (in the field or in class)

### **April 20: Consulting Business Development and Finals Prep**

- Business Development and Marketing
- Review and Practice Final

### **Reading and Assignments:**

Client Project Assignment: Consulting Project Report Draft (due 4/20)

WEEK 15 – APRIL 25 AND APRIL 27, 2023

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### April 25: Client Project – Final Deliverables Presentation

April 27: Client Project – Final Deliverables Presentation (cont'd)

# Reading and Assignments:

Client Project Assignment: Consulting Project Report Final (due 4/24)

MAY 10, 2023

Final, 8 am - 10 am