

THE OHIO STATE UNIVERSITY

Instructors:

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Office	FH 624	FH 648	FH 200	FH 636
location:				
Office	R 1:30-2:30 pm EST	T 2:30-3:30 pm EST	tba	tba
hours:				
Lecture:	T 12:45-2:05 pm EST	T 3:55-5:15 pm EST	W 3:20p-4:40p EST	W 5:10p-6:30p EST

Recitation Meeting Schedule:

Time	Instructor	Classsroom
T 12:45p-2:05p	Mi Kyong Newsom	Online
W 11:10a-12:30p	Mi Kyong Newsom	Online
W 12:45p-2:05p	Mi Kyong Newsom	SB330
W 2:20p-3:40p	Mi Kyong Newsom	SB330
W 3:55p-5:15p	Mi Kyong Newsom	SB330
T 3:55p-5:15p	Steve Lundregan	Online
W 8a-9:20a	Steve Lundregan	Online
W 9:35a-10:55a	Steve Lundregan	SB330
W 3p-4:20p	Steve Lundregan	SB320
W 4:35p-5:55p	Steve Lundregan	SB320
W 3:20p-4:40p	Andrea Prud'homme	Online
F 9:35a-10:55a	Andrea Prud'homme	Online
F 11:10a-12:30p	Andrea Prud'homme	SB330
F 12:45p-2:05p	Andrea Prud'homme	SB330
F 2:20p-3:40p	Andrea Prud'homme	SB330
W 5:10p-6:30p	Nil Karacaoglu	Online
R 11:30a-12:50p	Nil Karacaoglu	SB330
R 1:05p-2:25p	Nil Karacaoglu	SB330
R 2:40p-4:00p	Nil Karacaoglu	SB330
R 5:30p-6:50p	Nil Karacaoglu	Online

Course Materials / Software:

Required:

The textbook and/or courseware for this course is being provided via CarmenBooks. Through CarmenBooks, students obtain publisher materials electronically through CarmenCanvas, saving them up to 80% per title. The fee for this material is included as part of tuition and is listed as *CarmenBooks fee* on your Statement of Account. In addition to cost-savings, materials provided through CarmenBooks are available immediately on or

before the first day of class. There is no need to wait for financial aid or scholarship money to purchase your textbook.

Unless you choose to opt-out of the program, you do NOT need to purchase any materials for this course at the bookstore. For more information on the program or information on how to opt out, <u>please visit the CarmenBooks website</u>. Access Jacobs 16th ed through the McGraw-Hill Connect link in the course navigation.

Course Description:

Operations & Business Analytics 3230 is designed to provide students with a broad understanding of how effective operations and supply chain management practices contribute to the competitiveness and survival of manufacturing, service, and non-profit organizations. Students will apply selected concepts, tools, and methods to address strategic and tactical operational challenges with a systems perspective.

Course Learning Outcomes:

By the end of this course, students should successfully be able to:

- Explain how operations and supply chain practices contribute to the overall competitiveness of any organization and its value chains.
- Recognize and evaluate operational challenges and opportunities from a holistic perspective.
- Apply various concepts, methods, and tools by structuring, analyzing, and solving complex operational problems.
- Generate questions and curiosity to encourage future learning in operations and supply chain management.

How This Course Works:

Mode of delivery: All lectures and recitations are synchronous. The lectures are virtual synchronous using zoom. Depending on your assigned section, recitations are synchronous in-person or virtual synchronous using zoom.

Pace of online activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines (Monday Midnight) but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a **3-credit-hour course**. According to <u>Ohio State policy</u>, students should expect around an average of 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example).

Attendance and participation requirements: Your presence in class is mandatory. All in-class assignments are graded for accuracy. The following is a summary of everyone's expected participation:

• Preparation for Lecture:

You are expected to complete SmartBook (SB) assignment prior to Lecture. The SB provides the foundation for the student to participate in Lecture for the week's topics.

• Live Lecture sessions:

During the live lecture, the week's topic will be presented and discussed. In-class assignments will enable engagement and achievement of learning outcomes through active learning. All assignements are graded for accuracy and due by END of your registered lecture.

• Live Recitation sessions:

Students will be working individually and in teams to complete assignments involving problems related to each weekly topic. Assignments are graded for accuracy and due by END of your registered recitation.

Course technology:

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

• Self-Service and Chat support: ocio.osu.edu/help

Phone: 614-688-4357(HELP)Email: servicedesk@osu.edu

• **TDD**: 614-688-8743

Baseline technical skills for online courses

- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the <u>Canvas Student Guide</u>.

Required Technology skills specific to this course

CarmenZoom virtrual meetings

Required equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Required software

 <u>Microsoft Office 365:</u> All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found <u>at go.osu.edu/office365help.</u>

Carmen access

You will need to use <u>BuckeyePass</u> multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the <u>BuckeyePass</u> Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the <u>Duo Mobile application</u> to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Grading and Evaluation:

Graded assignments may come in three forms, and students should note the expectations for each in the descriptions of our class assignments below.

- Independent Work (†): Strictly non-collaborative, original-individual work. You may discuss this assignment only with your instructor. Discussions with other individuals, either in person or electronically, are strictly prohibited.
- **Collaboration Required (***):** An explicit expectation for collaboration among students either in-class or outside (i.e. group work).
- Optional-Collaboration (): Students are permitted, but not required, to discuss the assignment or ideas with each other. However, all submitted work must be one's original and individual creation.

Assignment Name	Points / Weight	Assignment Type
Exams	60	†
Out-of-class Assignments	20	*
In-class Assignments	20	ŧ†††
TOTAL COURSE POINTS	100	

Course Assignments:

In-Class Lecture & Recitation Assignments:

Operations & Business Analytics 3230 is designed to enable student engagement and achievement of learning outcomes through active learning. Assignments and quizzes will be will be employed in lecture and recitation. Therefore, your presence in class is **mandatory virtually using zoom**. Please note that there is **no make-up for all in-class participation grades** and you are responsible for all information covered in class. In-class lecture and recitation assignments will count **twenty percent** towards your grade. Absences are **NOT** excused or unexcused so therefore, students manage their own attendance.

Recitation Assignments

Students will be working individually and in teams to complete assignments involving problems related to each weekly topic. Assignments are graded for accuracy and due by **end of your registered recitation**.

Lecture Assignments 🛹

Individual assignments are designed to gauge how well you understand concepts discussed in lecture. Assignments are graded for accuracy and due by **end of your registered lecture**.

Out-of-Class Assignments:

Assignments are due every Monday by 11:59PM EST. See detailed schedule for specific quizzes, homework problems, and simulations. Out-of-class assignments will count **twenty percent** towards your grade.

SmartBook (SB) 🛹

There are weekly scheduled SB assignments. Questions designed to gauge how well you understand assigned materials. Full credit is dependent on effort and participation NOT accuracy. McGraw-Hill SB bases the grade based on reading time and answering questions. Each SB assignment is due 11:59PM EST Monday prior to the beginning of Lecture topic. Please refer to Carmen Assignment or Modules exact due dates.

Homework Problems (HW) 🛹

There are weekly scheduled homework problems. Homework problems allow you to apply methods and tools. You are given five attempts to master the assigned homework problems in Carmen Assignments due 11:59PM EST Monday. Please refer to Carmen Assignments or Modules for exact due dates.

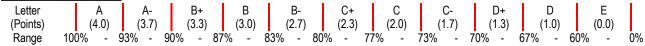
Exam Details:

Three exams have been scheduled for this course.

- Have been scheduled for the date and time noted in the detailed schedule
- Cover conceptual and technical content from assigned readings and in-class activities
- Are "closed" in nature no access to textbook, notes, neighbors, etc.

NOTE: No make-up, late, or early exams.

Grading Scale:



NOTE: Final grades are rounded to one decimal place.

Course Schedule:

See Carmen & attachement (tentative course schedule, subject to change).

Late Assignment Submissions:

If you are unable to participate during lecture or recitation, you will only get credit for the In-Class assignments if submitted by END of your registered lecture or recitation. Late submission deductions are 5% per day for all in-class assignments. In-class assignments are only available until following Monday Midnight. (NO EXCEPTIONS)

Feedback and Response Expectations:

- For grade discrepancy inquiry, please attend office hours for TA and/or Faculty
- For questions concerning Student Life Disability Services & Student Athlete Assistance, please contact Remi Weir (TA) at weir.98@osu.edu

Academic integrity:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct (https://trustees.osu.edu/bylaws-and-rules/code) and this syllabus may constitute Academic Misconduct (https://oaa.osu.edu/academic-integrity-and-misconduct)

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University, or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for

academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Disability Services:

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Grievances and Solving Problems:

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, associate dean for programs in the college, and to the provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department

Copyright:

© The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Safety and health requirements:

All teaching staff and students are required to comply with and stay up to date on all <u>University safety and health</u> <u>guidance</u>, which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

BusOBA 3230 AU21 DETAILED SCHEDULE (subject to change)

Class Session & Date		Topic (Reading)	Out-of-Class ASSIGNMENTS DUE Monday Midnight (11:59PM)	
L1	8.24/8.25 Tues/Wed	Introductions to Operations & Supply Chain Strategy	SB Introduction to Operations and Supply Chain Strategy (Mon 8.23)	
R1	8.25/8.26/8.27 Wed/Thur/Fri	Productivity Ratios	HW: Productivity Calculations (Mon 8.30)	
L2	8.31/9.01 Tues/Wed	Manufacturing and Service Processes	SB Manufacturing and Service Processes (Mon 8.30)	
R2	9.01/9.02/9.03 Wed/Thur/Fri	Break-even	• HW: BE (Mon 9.06)	
L3	9.07/9.08 Tues/Wed	Forecasting	SB Forecasting (Mon 9.06)	
R3	9.08/9.09/9.10 Wed/Thur/Fri	Forecasting Errors	HW: Forecasting (Mon 9.13)	
L4	9.14/9.15 Tues/Wed	Exam 1 (Operations & Supply Chain Strategy; Manuf	acturing and Service Processes & Forecasting)	
R4	9.15/9.16/9.17 Wed/Thur/Fri	Simulation		
L5	9.21/9.22 Tues/Wed	Strategic Capacity Management	SB Strategic Capacity Management (Mon 9.20)	
R5	9.22/9.23/9.24 Wed/Thur/Fri	Utilization, Capacity Cushion & Capacity Requirements	HW: Utilization, Capacity Cushion & Capacity Requirements (Mon 9.27)	
L6	9.28/9.29 Tues/Wed	Inventory Management	SB Inventory Management (Mon 9.27)	
R6	9.29/9.30/10.01 Wed/Thur/Fri	Q-model	HW: Inventory Management (Mon 10.04)	
L7	10.05/10.06 Tues/Wed	Purchasing & Supply Chain Design	SB Supply Chain Design (Mon 10.04)	
R7	10.06/10.07/10.08 Wed/Thur/Fri	Purchasing & Supply Chain Design	HW: SC Design (Mon 10.11)	
L8	10.12/10.13 Tues/Wed	NO CLASSES DUE TO AUTUMN BREAK		
R8	10.13/ 10.14/10.15 Wed/Thur/Fri	AUTUMN BREAK (10.14-15)		
L9	10.19/10.20 Tues/Wed	Project Management	SB Project Management (Mon 10.18)	
R9	10.20/10.21/10.22 Wed/Thur/Fri	Network Diagram: Critical Path, Slack, Minimum Cost Schedule	• HW: PM (Mon 10.25)	
L10	10.26/10.27 Tues/Wed	EXAM 2 (Capacity, Inventory, Purchasing & Supply C	hain Design; & Project Management)	
R10	10.27/10.28/10.29 Wed/Thurs/Fri	Simulation		
L11	11.02/11.03 Tues/Wed	Continuous Improvement	SB Continuous Improvement (Mon 11.01)	
R11	11.03/11.04/11.05 Wed/Thur/Fri	Continuous Improvement	• HW: CI (Mon 11.08)	
L12	11.09/11.10 Tues/Wed	Statistical Process Control	• SB SPC (Mon 11.08)	
R12	11.10/11.11/11.12 Wed/Thur/Fri (11.11 Veteran's Day)	SPC NO LIVE RECITATIONS - Asynchronous Recitation, see recording.	• HW: SPC (Mon 11.15)	
L13	11.16/11.17 Tues/Wed	Theory of Constraint	• SB TOC (Mon 11.15) • Goal Video, 45 min (Mon 11.15)	
R13	11.17/11.18/11.19 Wed/Thur/Fri	Theory of Constraint	• HW: TOC (Mon 11.22)	
L14	11.23/ 11.24 Tues/ Wed	NO LECTURES – THANKSGIVING BREAK (Nov 24-26)		
R14	11.24/11.25/11.26 Wed/Thurs/Fri	NO RECITATIONS – THANKSGIVING BREAK (Nov 24-26)		
L15	11.30/12.01 Tues/Wed	Lean Systems	SB Lean & VSM (Mon 11.29)	
L14	12.01/12.02/12.03 Wed/Thur/Fri	Value Stream Mapping	HW: VSM Pencil Pushing Case (Mon 12.06)	
L16	12.07/12.08 Tues/Wed	Exam 3 (CI, SPC, TOC, Lean & VSM) Last Day of Classes: Dec 8		