University of Cincinnati

I. Course Information:

  *Title*: Operations Management  
  *Course #:* 22-OM-3080 (004/005)  
  *Credit Hours*: 3  
  *Term*: Spring 2018  
  *Date/Time*: MWF 10:10-11:05 (004), 1:25-2:20 (005)  
  *Location*: 500 Swift (004), 220 Lindner (005)  
  *Prerequisites*: BANA 2081

II. Instructor Information:

  *Name*: Dr. Yinghao Zhang  
  *Title*: Assistant Professor of OBAIS  
  *Office Information*: 614A Lindner Hall  
  *Office*: (513)556-7383  
  *Fax*: (513)556-5499  
  *Email*: zhang5y7@ucmail.uc.edu  
  *Office Hours*: M/W/F 4-5 pm  
  *Communication Policy*: In the past I have found that many students prefer to send questions via email rather than face-to-face. I welcome your email questions and will try to return all messages within 24 hours. I am also flexible for other meetings in person or via phone by request. Please email me in advance for appointment.

III. Graduate Assistant:

  *Name*: Chris Uberti  
  *Email*: uberticr@mail.uc.edu  
  *Office Hours*: T/Th 2-3 pm in 010P Lindner

IV. Link to PACE:

This course aligns with PACE, the Lindner College of Business platform for developing the total business professional. [http://business.uc.edu/undergraduate/pace.html](http://business.uc.edu/undergraduate/pace.html)

**P – Professionalism**

- Enhance oral & written communication, express ideas clearly, logically and persuasively.
- Develop and practice teamwork skills through group projects and exercises.
- Practice professional habits of punctuality, preparation, respect and participation.

A – Academics
- Develop foundational knowledge of core business functions and their interactions within firms.
- Begin applying functional and cross-functional knowledge to critically analyze business problems; for example applying techniques for business plan development.

C – Character
- Learn and apply leadership techniques for project management (plan, brief, execute, debrief).
- Build an understanding and initial skills of managing diversity, including understanding cultural differences, and challenges and opportunities of global business.
- Understand importance of ethics and social responsibility in business and personal settings.

E – Engagement
- Build understanding of importance and practices of networking through interactions with business professionals and guest speakers.
- Develop awareness and appreciation of involvement in social organizations, community service, and professional group opportunities.

V. Course Materials

**Important!** You must read “Important Information about the Textbook and Connect Access.pdf” before purchase.


McGraw Hill Connect (McGraw Hill Ed) to accompany Operations Management – You will need a Student access code. Homework will be assigned via Connect.

Blackboard. [https://canopy.uc.edu/](https://canopy.uc.edu/). Sign onto UC Bb with your Username and Password to get to the materials for this class. Lecture notes and other class materials will be posted in advance of class. For ease of taking notes, please print out the lecture notes and bring them to class.

VI. Course Description:

Operations management, as a field, is responsible for the production of goods and services in organizations, both for-profit and not-for-profit. The operations area in a company or organization generally represents the largest portion of assets, working capital, and human resources. Operations also has a significant impact on other areas of the organization including marketing, finance, and accounting as well as, obviously, a substantial impact on how well the organization serves its external customers. As such, the performance of the organization is largely determined by the performance of operations.

In this introductory course you will learn about the fundamental concepts, principles and techniques for managing both manufacturing and service operations. We will explore the
primary decisions operations managers face and the various operations management strategic choices available. These decision includes demand forecast, product design, process selection, capacity, quality, and inventory, among others. You will learn how to apply quantitative and qualitative methods for improving management of operations.

VII. Student Learning Outcomes:

By the end of the course, you will be able to:

- Apply concepts and tools from the core operations functions to analyze and assess business performance;
- Propose and evaluate alternatives and select recommendations that address operations issues;
- Design plans for strategy implementations that are feasible to achieve operations goals;

VIII. Course Format:

Lecture. The objective of lectures and class discussions is not to cover everything in the textbook – note that there will be test questions from reading assignments that are not discussed in class. You are responsible for reading, studying, and ultimately understanding the material presented in the textbook. However, in class we will review the main concepts, principles, tools and techniques from the chapters to promote your understanding.

IX. Course Requirements and Grading Policies:

Grading for the course will be based on total points earned by the end of the course. Points will be derived from Alt-Cats (Active Learning Techniques / Classroom Assessment Techniques), Homework and Tests.

**Option 1 (with Alt-Cats):**

Alt-Cats (16@5 points each) = 80
Homework (5 out of 7 @ 20 points each) = 100
3 Tests (80 or 160 points each) = 320
Total Points (approximate) = 500

**OR**

**Option 2 (without Alt-Cats):**

Homework (5 out of 7 @ 20 points each) = 100
3 Tests (100 or 200 points each) = 400
Total Points (approximate) = 500

**Policy:** You will have until the first test to choose one grading system from the above options. You may not change your mind after test #1.
Your final grade will be based on a percentage scale with the scale never going above the following:

A  90%
B  80%
C  70%
D  60%
F  below 60%

Note: I do not use the +/- system of grading

Alt-Cats
- Active Learning Techniques and Classroom Assessment Techniques
- In-class exercises
- 16 Alt-Cats will be collected @ 5 points each.
- If you choose grading option 2, no need to turn in Alt-Cats for points.
- Alt-Cats cannot be made up

Homework
- 7 homework assignments @ 20 points each.
- Assigned and submitted electronically via Connect.
- Lowest two scores will be dropped or just skip two during the semester.
- Due dates can be found on the last page of the syllabus (typically on the following Tuesday except HW1).
- No late work is accepted!

Tests
- Under grading option 1, Tests 1&2 @ 80 points each; Test 3 @ 160 points.
- Under grading option 2, Tests 1&2 @ 100 points each; Test 3 @ 200 points.
- Schedules can be found on the last page of the syllabus.
- All tests are close book and close notes. However, you are allowed to bring one 8 \(\frac{1}{2}\)” X 11” sheet of paper, handwritten!!!

Make Up Policy
Tests must be taken with the class unless by prior arrangement. In case of a true emergency, please contact the instructor as soon as possible. Make-up tests are not routinely given and will be available only to students excused prior to the test. A point discount of 30% will be applied to make-up tests unless for verifiable illness, university sponsored event, jury duty, job-related travel (does not include job interview), and/or religious reason (e.g., observing a holiday). In any of these events, a verification must be submitted to me prior to the test. Discuss with me for what type of verification is acceptable. Any make-up tests must be made up within 7 days of the class event.
X. Academic Integrity:

As with all Lindner College of Business efforts, in this course you will be held to the highest ethical standards, critical to building character. Ensuring your integrity is vital and ultimately is your responsibility. To help ensure the alignments of incentives, the Lindner College of Business has implemented a “Two Strikes Policy” regarding Academic Integrity that supplements the UC Student Code of Conduct (see: http://www.uc.edu/conduct/Code_of_Conduct.html)

- All academic programs at the Lindner College of Business use this “Two Strikes Policy”; Any student who has been found responsible for two cases of academic misconduct may be dismissed from the College.
- All cases of academic misconduct (e.g., copying other students assignments, failure to adequately cite or reference, cheating, plagiarism, falsification, etc.) will be formally reported by faculty; and
- Students will be afforded due process for allegations as outlined in the policy.

XI. Students with Disability:

Students with disabilities who need academic accommodations or other specialized services while attending the University of Cincinnati will receive reasonable accommodations to meet their individual needs as well as advocacy assistance on disability-related issues. Students requiring special accommodation must register with the Disability Services Office. http://www.uc.edu/aess/disability.html

XII. Miscellaneous Items:

1. Counseling Services, Clifton Campus: Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.

2. Title IX: Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, I am required forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination, harassment or
violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 556-3349.

3. **LCB Weather Related Protocol:**
   When inclement weather threatens the safety of the University of Cincinnati community, the Senior Vice President for Administration and Finance may invoke University Rule 3361: 10-55-01 and declare an emergency closing.

   The Lindner College of Business will observe the university emergency closing protocol for all on-campus classes. During a university emergency closing, all college offices will be closed.

   Students should clarify with their course instructors how the closure will affect assignments and deadlines, and whether class information from the missed session(s) will be posted on Blackboard, and/or if the class will meet virtually during the closure.
Course Schedule:
Course schedule is tentative, subject to revision, depending on class progress.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic(s):</th>
<th>Readings</th>
<th>Assignments</th>
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| 1/8, 10, 12| Introduction              | Chapter 1: Read until “Efficiency, Effectiveness, and Value” (14)  
Chapter 2: Read only “Productivity Measurement” (33-35)             | HW1 – Chapter 2  
Due 1/18                  |
| 1/15       |                          |                                                                         |                           |
| 1/17, 19, 22| Forecasting              | Chapter 18: Skip sections “Exponential Smoothing with Trend” (453-454),  
Regression” (461-462), “Causal Relationship Forecasting” (466-468)             | HW2 – Chapter 18  
Due 1/30                  |
| 1/24, 26   | Product Design            | Chapter 3: Skip “Economic Analysis of Product Development Projects” (57-60). |                           |
| 1/29, 31, 2/2| Review Session & Test 1 |                                                                         |                           |
| 2/5, 7     | Process Selection         | Chapter 7: Read until “Break-Even Analysis” (153)                       |                           |
| 2/9        | Service Design/Queueing   | Chapter 9: All  
Chapter 10: Read until “Waiting Line Models” (230); skip all maths.    |                           |
| 2/12, 14, 16, 19| Process Analysis | Chapter 7: Read “Break-Even Analysis” (153-155)  
Chapter 11: Skip “Job Design Decisions” (278-279). | HW3 – Chapter 7&11  
Due 2/27                  |
| 2/21, 23   | Lean Operations           | Chapter 14: Skip all maths.                                             |                           |
| 2/26, 28, 3/2| Review Session & Test 2 |                                                                         |                           |
| 3/5, 7, 9  | Facility Layout           | Chapter 8: Skip “Mixed-Model Line Balancing” (180)                       | HW4 – Chapter 8  
Due 3/20                  |
| 3/19, 21   | Quality Management        | Chapter 12: All                                                          |                           |
| 3/23, 26, 28, 30| SPC and process capability | Chapter 13: Read until “Acceptance Sampling” (333).  
Follow PPT slides for Cp and Cpk calculations. | HW5 – Chapter 13  
Due 4/3                  |
| 4/2, 4, 6  | Inventory Management      | Chapter 20: Skip “A Single-Period Inventory Model” (522-524); Skip “Inventory Turn Calculation” and  
“Price-Break Model” (534-537)                                                | HW6 – Chapter 20  
Due 4/10                  |
| 4/9        | No class, work on HW6    |                                                                         |                           |
| 4/11, 13   | MRP/ERP                   | Chapter 21: Read until “Economic Order Quantity” (573)                  | HW7 – Chapter 21  
Due 4/17                  |
| 4/16, 18   | Supply Chain              | Chapter 15: Read until “Plant Location Methods” (383).  
Chapter 16: Skip “Measuring Sourcing Performance” (416-417).            |                           |
| 4/20       | Review Session            |                                                                         |                           |
| 4/25       | Test 3 (Time TBA)         |                                                                         |                           |