

# Syllabus for PADM 561 Spring 2025

Instructor: Dr. Yi Tang

Office Location: SSCO 3038, and/or via Zoom

Email: tangyi@unm.edu
Course Credits: 3.0

Office Hours: Mondays 4-6pm, and/or by appointment

Class Location: Dane Smith Hall 134 / via Zoom

Class Meeting Time: Mondays 6:00-8:45pm

### **Course Description**

In today's rapidly evolving healthcare landscape, success belongs to those organizations agile enough to respond to change effectively. This course prepares students to build resilience and deliver value in healthcare through strategic operations management. Students will learn to improve quality, reduce costs, and enhance patient experience while aligning operational elements with broader organizational goals.

The course explores key domains of healthcare operations—quality, delivery, cost, and flexibility—and equips students with a toolkit of concepts, and both qualitative and quantitative techniques essential for navigating and leading within complex healthcare systems. Through real-world cases and interactive scenarios, students will address practical challenges, from optimizing patient flow and managing supply chains to implementing cost-containment strategies and driving continuous quality improvement. Guided by the National Center for Healthcare Leadership (NCHL) competency model, this course emphasizes execution, transformation, and boundary-spanning skills, preparing students to create and sustain highly reliable, patient-centered healthcare organizations.

#### **Course Objectives and Student Learning Outcomes**

Upon completion of this course, students will be able to:

- 1. **Understand and Apply Core Operations Management Principles**: Identify and analyze foundational operations management concepts—such as quality improvement, capacity planning, and process optimization—and apply them to enhance healthcare delivery and patient outcomes.
- 2. **Execute Data-Driven Decision Making**: Leverage data analytics and evidence-based decision-making tools to evaluate and improve healthcare operations, from forecasting patient demand to monitoring performance through key metrics.
- 3. **Implement Quality Improvement and Cost Control Measures**: Design and implement quality management and Lean Six Sigma initiatives to increase efficiency, reduce errors, and eliminate waste, ultimately improving care quality while controlling operational costs.
- 4. **Optimize Patient Flow and Resource Utilization**: Develop strategies to streamline patient scheduling, reduce wait times, and efficiently manage capacity and resources to meet fluctuating demands in healthcare settings.
- 5. **Develop and Execute Value-Based Strategies**: Formulate and execute operational strategies that support value-based care, ensuring alignment with organizational goals for quality, timely delivery, cost efficiency, and adaptability to industry changes.

- 6. **Lead and Collaborate Across Functional Boundaries**: Enhance leadership and collaboration skills to work effectively within interdisciplinary teams, integrating clinical, administrative, and operational perspectives to support high-performance healthcare environments.
- 7. **Adapt to Emerging Trends and Technologies**: Critically assess and incorporate new technologies, such as telehealth and health information systems, to improve operations and meet the needs of a diverse patient population in a dynamic healthcare environment.

## **Textbooks and Supplies**

- **Required textbook**: Operations Management in Healthcare: Strategy and Practice, 2nd Edition (2021) by Karuppan, Dunlap, and Waldrum. ISBN: 9780826147714 | eBook ISBN: 9780826147721
- The textbook will be available from the UNM Bookstore. The Bookstore can guide you to the purchase of a physical textbook or to purchase of an electronic copy of the text.
- Additional cases, readings, and videos will be available in the Canvas course modules each week.

#### **Course Assessments**

Assessment	% of Grade
Attendance	10%
In-class Activities	10%
3 Team Assignments	30%
Midterm Exam	20%
Team Project	30%
Total	100%

## **Grading Scale**

A+	98 - 100%		
Α	93 – 97%	B-	75 – 79%
A-	89 – 92%	C+	70 – 74%
B+	85 – 88%	С	60 – 69%
В	80 – 84%	F	Below 60%

#### **Grade Requirements for Graduation**

To earn a graduate degree at the University of New Mexico, students must have a minimum cumulative grade point average of 3.0 in graduate-level courses taken in graduate status at the time of degree completion as well as a grade point average of at least 3.0 for courses listed in their Program of Studies or Application for Candidacy. Students may not graduate with Incompletes or unrecorded grades (NR) pending in any graduate course, nor may they graduate while on probation. Courses taken to meet undergraduate deficiencies/prerequisites cannot be used to meet graduate degree requirements nor are they calculated into the graduate grade point average. It is expected that the student earns at least a B (3.0) in each of these courses. If a grade of less than "B" (3.0) is earned in any of these, the major department may deem that the prerequisite has not been satisfied. No more than 6 credit hours of coursework in which a grade of "C" (2.0), "C+" (2.33) or "CR" (grading option selected by student) was earned may be credited toward a graduate degree. Courses offered only on a CR/NC basis and required by the graduate program are excluded from this limitation.

## **Course Modality**

This course is being scheduled as an O+C (Online + Classroom) course. In-person students (Section 010) will attend class face-to-face and remote students (Section 080) will attend via Zoom. To ensure equal learning experience and that students from both sections can communicate with each other, the Canvas sessions for both class sections are combined into a joining session. For the Zoom meetings, you will need:

- A headset with microphone. Headsets are widely available at stores that sell electronics, at the UNM Bookstore or online.
- A high-speed internet connection is highly recommended for these sessions. Please test your wireless Internet connection for audio and/or video quality prior to web conferencing.
- A Zoom link which can be found on Canvas → "Zoom Meetings".

For UNM Web Conference Technical Help: (505) 277-0857

#### **Technical Skills**

In order to participate and succeed in this class, you will need to be able to perform the following basic technical tasks:

- Use Canvas (help documentation located in "Help" > "UNM Canvas Help Site" link on left course menu, and also at Online Student Documentation).
- Use email including attaching files, opening files, downloading attachments
- Copy and paste within applications including Microsoft Office
- Open a hyperlink (click on a hyperlink to get to a website or online resource)
- Use Microsoft Office applications
- Create, download, update, save and upload MS Word documents and MS PowerPoint presentations
- Download, annotate, save and upload PDF files
- Download, install, and use the in-course web conferencing tool (Zoom)

### **Technical Requirements**

### Computer

- A high-speed Internet connection is highly recommended.
- A supported web browser: Detailed Supported Browsers and Operating Systems.
- Any computer capable of running a recently updated web browser should be sufficient to access online
  course resources (Canvas, the library, YouTube, etc.). However, bear in mind that processor speed,
  amount of RAM and Internet connection speed can greatly affect performance. Many locations offer
  free high-speed Internet access including <u>UNM's Computer Pods</u>.

Microsoft Office products are available free for all UNM students (more information on the <u>UNM IT Software</u> <u>Distribution and Downloads page</u>)

Canvas outages: Unexpected Canvas system outages are rare but, if they occur, I will advise everyone on how to proceed. For UNM Canvas Technical Support: (505) 277-0857 (24/7) or visit the <u>Canvas Info Site</u>.

## **Coursework and Participation**

### **Procedures for Completing Coursework**

- Deadlines get things done. The deadlines for the assignments in class are designed for your benefit and to balance my workload. I strongly encourage you to use these deadlines to help your own time management for the semester. However, we are living in unpredictable times. If you have a schedule conflict, please contact me as soon as possible before the deadline, and we will work together to find a solution.
- All written work needs to be submitted online. If you have difficulty using a tool to complete
  work, please reach out to UNM's Canvas Support immediately and notify me as well.

#### **Credit Hour Statement**

This is a three credit-hour course. Class meets for 2 hours and 45 minutes of direct instruction each week during the semester. Please plan for a *minimum* of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week. (Some weeks will be a little less, some a little more.)

**Support:** Student Learning Support at the Center for Teaching and Learning offers individual consultations and online support for graduate students through the <u>Graduate Resource Center</u> (GRC). This includes support through the <u>UNM Graduate Online Writing Lab</u>, where you can seek feedback on your writing and research projects.

## **Attendance Policy**

Regular and punctual attendance is essential to both doing well and to fostering a space for learning. UNM *Pathfinder* policies apply, which in part means instructor drops based on nonattendance are possible. This class is an interactive learning class, which means that student engagement is vital to maximizing the learning experience for everyone. One great benefit of our program is that you have a chance to work with other excellent students who are doing impressive work. However, in order to benefit from this network, you have to get to know your fellow students. If you don't show up, you won't. If you show up and don't engage, you won't. I will do as much as I can to optimize opportunities for connections in our virtual classroom experience. That said, I understand you have work, family and life commitments which at times conflict with our class schedule. **Please communicate with me before any (un)expected absence**. Three or more unexcused absences may result in permanent removal and a drop from the course with a "W" grade, or an "F" grade at the end. All class sessions will be available as recordings on Canvas as quickly as the recordings are finished processing. It is **your responsibility to take the initiative** in arranging to make up missed lectures and/or other course activities.

#### **Office Hours**

I have office hours set aside on Mondays from 4-6pm, but I prefer to do all office hours by appointment to best manage all our schedules. Send me an email to set up a meeting (time, day, mode, what the meeting is about), and we'll get something scheduled.

#### **Expectations for Participation**

- students are expected to learn how to navigate in Canvas
- students are expected to communicate with one another in team projects
- students are expected to keep abreast of course announcements
- students are expected to use the Canvas course inbox as opposed to a personal email address
- students are expected to keep instructor informed of class related problems, or problems that may prevent the student from full participation

#### Netiquette

Students are expected to follow the <u>guidelines of netiquette</u> when communicating and interacting in our course. Netiquette refers to a set of guidelines in online communication that help ensure positive interactions. In this case specifically, these guidelines seek to keep our online class a positive learning environment for everyone.

#### **Accommodations**

UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact <u>Accessibility Resource</u> <u>Center</u> at arcsrvs@unm.edu or by phone at 505-277-3506.

## Responsible Learning, Academic Honesty, and Al Policy

Cheating, plagiarism, and unethical use of Generative AI (academic dishonesty) are often driven by lack of time, desperation, or lack of knowledge about how to identify a source. Communicate with me and ask for help, even at the last minute, rather than risking your academic career by committing academic dishonesty. Academic dishonesty involves presenting material as your own that has been generated on a website, in a publication, by an artificial intelligence algorithm (AI), by another person, or by otherwise breaking the rules of an assignment or exam. It is a <a href="Student Code of Conduct">Student Code of Conduct</a> violation that can lead to a disciplinary procedure. When you use a resource (such as an AI, article, a friend's work, or a website) in work submitted for this class, document how you used it and distinguish between your original work and the material taken from the resource.

**Support:** Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and other resources, including support on how to cite a source, are available through <a href="Student Learning Assistance">Student Learning Assistance</a> at the Center for Teaching and Learning.

## **Email policy**

UNM policy 2540: Student Email notes that email policies may be determined by individual faculty for instructional purposes, which will be specified in the course syllabus, and must be followed by the students. For this class, all communications must be conducted either within the UNM Canvas or students' and instructor's UNM email. This is both to promote efficiency and to implement best practices in regard to digital communication, which as future health administrators will be of the utmost importance.

### **Indigenous Peoples' Land and Territory Acknowledgement**

Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico - Pueblo, Navajo, and Apache since time immemorial - have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

### **Library Services**

UNM-Main campus provides many library services and tutorial services, including a range of services for distance students. For library services, go to <a href="UNM Libraries">UNM Libraries</a> for links to link to specific libraries on campus or to contact a librarian.

#### Weather

During the semester, contact the UNM hotline at 505-277-7669 to determine if classes havebeen cancelled. Appropriate adjustments will be made to the schedule as needed in the event of weather-related class cancellations.

### **Important UNM Dates**

The Registrar's Office provides important semester deadline dates that students should know.

### **Title IX**

The University of New Mexico and its faculty are committed to supporting our students and providing an environment that is free of bias, discrimination, and harassment. The University's programs and activities, including the classroom, should always provide a space of mutual respect, kindness, and support without fear of harassment, violence, or discrimination. Discrimination on the basis of sex includes discrimination on the basis of assigned sex at birth, sex characteristics, pregnancy and pregnancy related conditions, sexual orientation and gender identity. If you have encountered any form of discrimination on the basis of sex, including sexual harassment, sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. You can access the confidential resources available on campus at the LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. If you speak with an instructor (including a TA or a GA) regarding an incident connected to discrimination on the basis of sex, they must notify UNM's Title IX Coordinator that you shared an experience relating to Title IX, even if you ask the instructor not to disclose it. The Title IX Coordinator is available to assist you in understanding your options and in connecting you with all possible resources on and off campus. For more information on the campus policy regarding sexual misconduct and reporting, please see UNM Administrative Policy 2740 and CEEO's website.

If you are pregnant or experiencing a pregnancy-related condition, you may contact <u>UNM's Office of Compliance</u>, <u>Ethics</u>, <u>and Equal Opportunity</u> at ceeo@unm.edu. The CEEO staff will provide you with access to available resources and supportive measures and assist you in understanding your rights. UNM's lactation stations are marked on the <u>UNM campus map</u>.

## Citizenship and/or Immigration Status

All students are welcome in this class regardless of citizenship, residency, or immigration status. I will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to me, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our <u>website</u>.

#### **Respectful Conduct Expectations**

I am committed to building with you a positive classroom environment in which everyone can learn. I reserve the right to intervene and enforce standards of respectful behavior when classroom conduct is inconsistent with university expectations [and/or classroom community agreements]. Interventions and enforcement may include but are not limited to required meetings to discuss classroom expectations, written notification of expectations, and/or removal from a class meeting. Removal from a class meeting will result in an unexcused absence. [Insert number] or more unexcused absences may result in permanent removal and a drop from the course (see attendance policy). The University of New Mexico ensures freedom of academic inquiry, free expression and open debate, and a respectful campus through adherence to the following policies: <a href="D75:Classroom Conduct">D75: Classroom Conduct</a>, <a href="Student Code of Conduct">Student Code of Conduct</a>, <a href="University Policy 2240">University Policy 2240 — Respectful Campus</a>, <a href="University Policy 2210">University Policy 2210 — Campus Violence</a>.

## **Connecting to Campus and Finding Support**

UNM has many resources and centers to help you thrive, including <u>opportunities</u> to get involved in <u>campus</u> <u>life</u>, <u>research experiences</u>, <u>mental health resources</u>, <u>academic support such as tutoring</u>, <u>resource centers</u> for people like you, free food at <u>Lobo Food Pantry</u>, <u>jobs on campus</u> and <u>financial capability support</u>. Your advisor, staff at the resource centers and <u>Dean of Students</u>, and I can help you find the right opportunities for you.

#### Wellness

If you do need to stay home due to illness or are experiencing a wellness challenge, please take advantage of the resources below. You can communicate with me at <a href="mailto:tangyi@unm.edu">tangyi@unm.edu</a> / 612-300-2908 and I can work with you to provide alternatives for course participation and completion. Let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources.

### Support

- Student Health and Counseling (SHAC) at (505) 277-3136.
- <u>TimelyCare</u>: Free 24/7 virtual care services (medical, emotional support, health coaching, self-care, basic needs support).
- <u>LoboRESPECT Advocacy Center</u> (505) 277-2911: help with contacting faculty and managing challenges that impact your UNM experience.

# **SCHEDULE OF ACTIVITIES (Tentative)**

*Note*: The Schedule of Activities will be updated throughout the semester. Changes will be announced in class and provided in writing. *Reminder*: Unless otherwise posted, assessments are due **BEFORE class** on the given day.

<u>Covered Materials:</u> You are highly recommended to read/listen/view them the before each class and come with questions to maximize learning.

<u>Presentation Materials</u> will be assigned to a team who is required to review them BEFORE class and ready to make a class presentation.

Advanced Materials are not required but can be great resources if you are interested in learning/researching more about the topic.

Week 1, Jan. 20	Assessments
No Class, Martin Luther King Jr. Day	
Week 2, Jan. 27	Assessments
Module 0: Course Introduction  Covered Materials:  Course Syllabus  Course Canvas Site  In-class Activities:  Self-introduction  Discuss and determine team forming strategy	Pre-course Survey     Due 01/26 Sunday     11:59 PM.
Module 1: Introduction to Healthcare Operations Management  Covered Materials:  • Chapter 1: Healthcare – Past, Present, and Future	
<ul> <li>Video: Service Operations by Prof. T. Netland (<a href="https://www.youtube.com/watch?v=d3jlW06Pcgk">https://www.youtube.com/watch?v=d3jlW06Pcgk</a>)</li> <li>Advanced Materials:</li> <li>Kc, D. S., Scholtes, S., &amp; Terwiesch, C. (2020). Empirical research in healthcare operations: Past research, present understanding, and future opportunities. Manufacturing &amp; Service Operations Management, 22(1), 73-83.</li> </ul>	
<ul> <li>Keskinocak, P., &amp; Savva, N. (2020). A review of the healthcare-management (modeling) literature published in manufacturing &amp; service operations management. <i>Manufacturing &amp; Service Operations</i> <i>Management</i>, 22(1), 59-72.</li> </ul>	

Week 3, Feb. 03	Assessments
Module 2: Operations Strategy	Team Names and
Covered Materials:	Members Due
Chapter 2: Strategy	
<ul> <li>Borgstrom, M. P., Deshpande, O. M., &amp; Balcezak, T. J. (2017). Pursuit of value drives strategy to improve operations and outcomes. Frontiers of Health Services Management, 34(2), 3-13.</li> </ul>	
Advanced Materials:	
<ul> <li>Reeves, M., Moldoveanu, M., &amp; Job, A. (2023). A new era of competition requires a highly dynamic approach to strategy. HARVARD BUSINESS REVIEW, 101(5-6), 112-121.</li> </ul>	
<ul> <li>Boyer, K. K., Swink, M., &amp; Rosenzweig, E. D. (2005). Operations strategy research in the POMS journal. Production and Operations Management, 14(4), 442-449.</li> </ul>	
<ul> <li>Cachon, G. P., Girotra, K., &amp; Netessine, S. (2020). Interesting, important, and impactful operations management. Manufacturing &amp; Service Operations Management, 22(1), 214-222.</li> </ul>	
<ul> <li>Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532-550.</li> </ul>	
In-class Activities:	
Guest lecture by Prof. Paul Musgrave on Strategic Planning	
Week 4, Feb. 10	Assessments
Module 3: Forecasting Demand	Assignment 1
Covered Materials:	available after class
Chapter 3: Forecasting Demand	
Week 5, Feb. 17	Assessments
Module 4: Project Management	
Covered Materials:	
Chapter 4: Project Management	
Week 6, Feb. 24	Assessments
Module 5: Competing on Delivery (1)	Assignment 1 Due
Covered Materials:	
Chapter 8: Process Analysis and Design	

Week 7, Mar. 03	Assessments
Module 5: Competing on Delivery (2)	
Covered Materials:	
Chapter 9: Capacity and Demand	
Week 8, Mar. 10	Assessments
Module 5: Competing on Delivery (3)	Assignment 2
Covered Materials:	available after class
Chapter 10: Scheduling Staff, Patients, and Jobs	
Week 9, Mar. 17	Assessments
No Class, Spring Break	
Week 10, Mar. 24	Assessments
Midterm Exam Week: Midterm available Tuesday 03/24 9:00 AM	Assignment 2 Due
In-class Activities:	Team Project
Midterm review	proposal Due
	Midterm available     03/25 9:00 AM
Week 11, Mar. 31	Assessments
Module 6: Competing on Quality	Midterm Exam Due
Covered Materials:	
Chapter 5: Quality Management	
Chapter 6: Statistical Process Control	
Chapter 7: Lean Six Sigma	
<ul> <li>Note: you only need to skim through Chapters 5, 6, 7 of the textbook. Only materials covered in lecture slides will be required in the exams. Quality management will be discussed in greater details in PADM 565: Healthcare Quality Management.</li> </ul>	
Week 12, Apr. 07	Assessments
Module 7: Competing on Cost (1)	
Covered Materials:	

Chapter 11: Supply Chain Management	
Week 13, Apr. 14	Assessments
Module 7: Competing on Cost (2)  Covered Materials:  • Chapter 12: Cost: Basic Concepts	<ul> <li>Team Project midterm report Due</li> <li>Assignment 3 available after class</li> </ul>
Week 14, Apr. 21	Assessments
Module 8: Competing on Flexibility (1)  Covered Materials:  • Chapter 13: Anticipating and Adapting to Change	
Week 15, Apr. 28	Assessments
Module 8: Competing on Flexibility (2)  Covered Materials:  • Chapter 14: Health IT – An Enabler of Flexibility  • Chapter 15: Accreditation, Awards, and the Highly Reliable Organization	Assignment 3 Due
Week 16, May. 5	Assessments
Module 9: Team Project Presentation  In-class Activities:  • Team project presentation	Team Project slide deck Due
Week 17, May. 12	Assessments
No Class, Final Exam Week (No Final Exam for this course)	Team Project report     Due 05/12 11:59 PM

Reminder: Unless otherwise posted, assessments are due **BEFORE class** on the given day.