

# **OPERATIONS MANAGEMENT**

## MAN 3504 COURSE SYLLABUS – SECTION 2776

#### Online Instruction

(Spring 2024)

#### WELCOME

Why is this course important? Because it enables our organizations to gain a competitive advantage! This is vital for students that want to run their own business or be an effective manager in an organization. Whether for-profit or not for profit, small or large, our business strategies need operations management to productively manage resources for the delivery of quality products or services.

#### INSTRUCTOR

Name: Carol Ritchie

Email: Ritchie.Carol@spcollege.edu

**Phone:** 727-365-2566 (Personal Cell – Please use SPC email to contact me for a phone conference)

**Office and Online Hours:** I do not have Office Hours, but will schedule Zoom/Team meetings as needed.

**Instructor Webpage:** https://web.spcollege.edu/instructors/id/Ritchie.Carol

## ACADEMIC DEPARTMENT

**Dean of the College of Business Name:** Emmanuel Hernandez Agosto

**Office Location:** Downtown

Office Phone Number: 727-712-7176 Email: hernandez.emmanuel@spcollege.edu

Academic Chair Name: Michael Ewell

Office Location: St. Pete/Gibbs TE 131-B Office Phone Number: 727-791-2610 Email: ewell.mike@spcollege.edu

//Website - College of Business

#### **COURSE INFORMATION**

## **Course Description**

This course focuses on the managerial decision science organizations use to create a competitive advantage. The emphasis is on ten strategic operations management decisions that improve productivity and quality across the extended enterprise to deliver our products and services. Students will examine key factors impacting performance, as well as apply mathematical and computer applications to build analytic skills.

## **Course Major Learning Objectives**

- Week 1: Evaluate the tactical impact that operations management decisions have in implementing an organization's strategy.
- Week 2: Assess how project management and forecasting are used to better manage operations.
- Week 3: Evaluate how product/service design impacts sustainability and quality management.
- Week 4: Critique the process, capacity, location, and layout operations management strategies.
- Week 5: Evaluation human resources decisions, supply chain management, and inventory management strategies used in operations.
- Week 6: Examine sales and operations planning (S&OP), materials requirements planning (MRP), enterprise resource planning (ERP), short-term scheduling, waiting lines, and simulation models.
- Week 7: Assess how lean operations, maintenance and reliability, linear programming, learning curves, and big data business analytics enables operating decisions.
- Week 8: Connect and integrate lessons on operations management through a comprehensive final exam.

## **Prerequisites**

A working knowledge of algebra is required. Students encouraged to know some probability and statistics (will review in course).

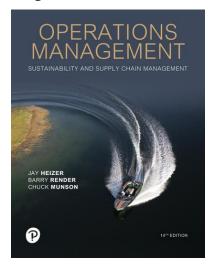
Further computer skills are vital as decision science software (POM for Windows and ExcelOM) is available through MyOMlab to aid in the analytics, as well as students may use MS Office Excel.

This course is offered also in a 12-week express format each semester, as well as 8-week Live Online or Blended option each modmester. The same assignments are used across all formats to support learning standards.

## AVAILABILITY OF COURSE CONTENT

The course automatically opens at midnight the Thursday prior the first day of class. Students may work ahead up until the due date at their own pace. Students must complete specific action items in the Start Here and First Day module to open further Course Content which contains the weekly lessons.

## REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION



1. **Textbook** – **14**<sup>th</sup> **Edition** (**2023**): *Operations Management: Sustainability and Supply Chain Management* by Jay Heizer, Barry Render, & Chuck Munson

Available as eText, Student Value Edition (unbound pages, 3 hole punched), bound, purchase, rental, used, new, etc.

# 2. MyLab Operations Management (MyOMlab) Access: Pearson MyLab & Mastering

SPC Bookstore ISBN includes eText and MyOMlab in bundle under the First Day program. After successful completion of the Start Here syllabus introduction quiz the *First Day* module will open and explain how to register for MyOMlab.

Students should have <u>MSOffice</u> and <u>Adobe Acrobat Reader</u>, as well as access to a web camera and microphone to support video submissions.

Students should have regular access to a computer connected to the Internet. When viewing online videos or completing online assignments, students should have an Internet connection that is stable and will not drop their connection. Students without should consider making arrangements where a stable high-speed internet connection is available.

## **IMPORTANT DATES**

Course Dates: January 16 – March 8

Drop Date with a Refund: January 19

**Drop Date with a Grade of "W":** February 21 **Drop Date with a Grade of "WF":** March 7

#### **SCHEDULE**

The MyCourses Course Content has weekly lessons explaining each action item due. Additionally, further resources are provided to support studying each week. Each week plans a minimum 15-18 hours for learning standards and articulation. All submissions are due by 11:59 PM (EST).

Date	Module #	Module Topics	Assessments Due*
1/16 – 1/21	Week 1	Chapter 1 - Operations and Productivity	Due by Tuesday 11:55 PM  • Syllabus Introduction Quiz Due by Fri/Sun 11:55 PM  • Class Introduction Video/Discussion and Responses

Date	Module #	Module Topics	Assessments Due*
			Due by Saturday 11:55 PM  Dynamic Study Module 1  Quiz 1  Due by Sunday 11:55 PM  Study Plan 1  Homework 1
1/22 – 1/28	Week 2	Chapter 3 - Project Management Chapter 4 - Forecasting	Due by Saturday 11:55 PM  Dynamic Study Module 2 Quiz 2 Due by Sunday 11:55 PM Study Plan 2 Homework 2
1/29 – 2/4	Week 3	Chapter 5 - Design of Goods and Services Supplement 5 - Sustainability in the Supply Chain Chapter 6 - Managing Quality Supplement 6 - Statistical Process Control	Due by Wednesday/Friday 11:55 PM
2/5 – 2/11	Week 4	Chapter 7- Process Strategies Supplement 7 - Capacity and Constraint Management Chapter 8 - Location Strategies Chapter 9 - Layout Strategies	Due by Saturday 11:55 PM  Dynamic Study Module 4  Quiz 4  Due by Sunday 11:55 PM  Study Plan 4  Homework 4
2/12 – 2/18	Week 5	Chapter 10 - Human Resources, Job Design, and Work Measurement Chapter 11 - Supply Chain Management Supplement 11 - Supply Chain Management Analytics Module C - Transportation Models Chapter 12 - Inventory Management	Due by Wednesday/Friday 11:55 PM

Date	Module #	Module Topics	Assessments Due*
2/19 – 2/15		Chapter 13 - Aggregate Planning and S&OP Chapter 14 - Material Requirements Planning (MRP) and ERP Chapter 15 - Short-Term Scheduling Module D - Waiting-Line Models (not Models B, C, &D) Module F - Simulation	Due by Saturday 11:55 PM
2/26 – 3/3	VV CCK /	Chapter 16 - Lean Operations Chapter 17 - Maintenance and Reliability Module B - Linear Programming Module E - Learning Curves Module G - Applying Analytics to Big Data in Operations Management	Due by Wednesday/Friday 11:55 PM
03/4 - 3/8	Week 8	Comprehensive	Due by Wednesday 11:55 PM • Final Exam

<sup>\*</sup>Alterations to the schedule may be made as needed by the judgement of the professor.

#### **ASSIGNMENTS**

What do I need to do to be successful in this course? Break down the schedule and plan your time each week. Follow the weekly lessons in the MyCourses Course Content using the resources. Recognize this field of study is often new to students and it will take time to build your vocabulary and master the analytics.

- **Readings** Assigns textbook chapters, supplements, and modules each week.
- **Dynamic Study Modules** Delivers personalized learning to reinforce chapter concepts. Students must earn ≥ 30% to access corresponding quiz by Saturday each week (3 attempts on questions).
- Quizzes Assesses terminology from the assigned reading. Students have 30 minutes (20 questions) and 3 attempts each week on concepts by Saturday. The highest grade of 3 attempts is used after the due date.
- Study Plans Presents practice analytical problems with MyCourses PDFs and tutorials, also MyOMlab learning aids and textbook examples. Use the resources to master these practice problems (unlimited attempts). Students must earn ≥ 30% to access corresponding homework by Sunday each week.
- **Homework** Assigns mathematical problems in different scenarios from study plan practice problems. Students need to show mastery in analytic methods by Sunday. Students can redo a homework problem once (i.e. two attempts per problem) if no MyOMlab learning aid was used on the first attempt.
- **Simulations** Role plays different realistic models applying the lesson concepts and analytics, as well as and includes discussions posts due by Wed. with replies by Fri. on assigned weeks.

• **Final Exam** – Consolidates concepts and terms from weekly dynamic study modules and quizzes, as well as analytics from study plan and homework problems, in a comprehensive exam. There is one timed submission (max. 3.5 hours). Students must attempt Quiz 7 and Homework 7 to access the final exam which is due by Wednesday in Week 8.

## STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS

## **Required Interaction**

This course has four discussion topics for student-students and/or student-instructor interaction. Graded discussions include an assessment rubric and offers video and written submission options, as well as one day late partial credit on posts and/or replies. The other assignments in the class focus on student-content interaction with both MyCourses and MyOMlab.

Students should <u>create notifications</u> and <u>register their phone</u> for text messages to help stay on track. Students can also <u>register email</u> and <u>forward email</u> from MyCourses so they do not miss vital communication about their courses.

## **Attendance and Participation**

In Week 1 the instructor will report students as 'No Show' if students do not provide any submissions. While in Week 2 through Week 6, students must complete the majority of assignments each week to be considered in attendance and actively participating in the course. For example, if there are five submissions students must complete three of the five submissions. If students are absent two weeks during this time period, they will be administratively withdrawn from the course.

If an attendance issue is reported in the first two weeks of the course, students will receive a grade of W. If later in the course, and students did not self-withdraw by the deadline, instructors will report students at the 60% point as not actively participating which results in a grade of WF.

As the college-wide syllabus addendum states, students with financial aid may be responsible for paying for the class upon withdrawal. Students should always work with their academic advisor and financial aid counselor to understand potential consequences of their course scheduling decisions.

View the college-wide attendance policies included in How to Be a Successful Student.

## **Grading**

Students earn points which are a percentage distributed by letter grade.

Final Grade	Min. Points		Max. Points
A	466.2	to	518
В	414.4	to	466.1
С	362.6	to	414.3
D	310.8	to	362.5
F	0	to	310.7

A final grading curve may be applied at the instructor's discretion.

There are various opportunities for success across different learning styles and assessment methods that test higher order cognitive and affective skills. As the schedule shows, the course is broken down into 8 weekly modules with a variety of assignments designed for students to learn the 10 key operations management decisions, as well as the analytical tools used in each of the decisions.

Assignment Type	Points	Final Grade Weight
Introduction Quiz and Discussion	20	3.9%
Dynamic Study Modules	18	3.5%
Quizzes	140	27.0%
Study Plans	100	19.3%
Homework	140	27.0%
Simulations	30	5.8%
Final Exam (comprehensive)	70	13.5%
Total Points	518	100%

Late submissions may be accepted with a documented excuse (i.e., doctor note, family death certificate, etc.). Flexibility may be granted due to illness or other challenges. Contact the professor to discuss your needs. Advanced notice should be provided to arrange alternative needs. Late submissions should be complete within one week from the original due date.

Per SPC policy, an incomplete grade requires students to provide documented evidence of the reason(s) for extension, have a minimum of 80% of the course completed, be considered in good standing (i.e., C or better), and acknowledge in writing the plan to finish remaining work no later than the end of the sixth week in the next semester. After that time a grade of F (or higher if justified) is assigned

# How to check your Grades and review feedback:

- Checking Your Grades and Reading Instructor Feedback
- Checking Your Attendance
- Checking Discussion Grades and Reading Instructor Feedback
- Reviewing MyOMlab Assignments from Results Page

## **Conduct, and Netiquette**

The college-wide syllabus addendum is provided in SPC Resources for every class (<u>How to Succeed link</u>). Closely read success factors and expectations. The professor has authority to remove disruptive students and delete any inappropriate posts. Students should first speak to their professor to resolve any resource or grade issues.

SPC has outlined expectations for student behavior and interaction for online discussions, emails, and other forms of communication. View the Student Expectations in <a href="How to Be a Successful Student">How to Be a Successful Student</a>.

## **Academic Honesty**

Students agree to the SPC Honor Code policy when they register for each course. Students are expected to be honest in completing all their academic work and students have the ethical obligation to report violations of the academic honesty polices they may witness.

Students that receive assistance from a tutor for this course must ensure all scheduled quizzes, homework assignments, simulations with discussions, and exams are their own work. *Tutors may assist with study plan practice problems and other similar problems only*.

Students are prohibited from using Generative AI (Artificial Intelligence) for any submission in this course. If students use AI or tutors for their graded work, it violates the academic honor code agreed upon when registering for the class. For example, if writing a discussion post, it needs to be your own original work as use of AI to make a post or reply is unacceptable for this course. Also, it is unlikely AI understands what you did in the simulation to write an effective post or reply to discuss it which may lead to low performance.

AI or tutors are not a replacement for building your own critical thinking needs for the submissions in this course. Organizational leaders and managers expect students that take this kind of course to learn the objectives for the course. If students cut their learning short violating the academic honesty and integrity polices, they leave themselves at a deficient level for building the knowledge, skills, and abilities needed to support their own business and/or career too.

Failure to comply with the college academic honesty and integrity polices during course studies may result in academic and disciplinary action, up to and including expulsion from the college. View the <u>Academic Honesty Policy</u> or talk to your professor if you have further questions.

# Copyright

Copyrighted material within this course, or posted on this course website, is used in compliance with United States Copyright Law. Under that law you may use the material for educational purposes related to the learning outcomes of this course. You may not further download, copy, alter, and/or distribute the material unless in accordance with copyright law and with permission of the copyright holder. For more information on copyright visit: Copyright.gov.

## LEARNER SUPPORT

**Accessibility:** This course is designed to be welcoming to, accessible to, and usable by everyone, including students who are English-language learners, have a variety of learning styles, have disabilities, or are new to online learning. Be sure to let your professor know immediately if you encounter a required element or resource in the course that is not accessible to you. Also, let the professor know of changes they might be able to pursue to make improvement to the course for future students.

If you have documentation of a disability or feel you may have a disability, St. Petersburg College recognizes the importance of equal access to learning opportunities for all students. Accessibility Services (AS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students registered with AS, who are requesting accommodations, should contact their instructor by the start of the course. Students who have, or think they may have, a disability (e.g. learning disability, ADD/ADHD, psychiatric, medical/orthopedic, vision, and/or hearing), are invited to contact the Accessibility Coordinator (AC) that serves your campus for a confidential discussion.

Answers to questions regarding accommodations may be found at the <u>Accessibility Services</u> site. If you are in need of accommodations, please contact a campus <u>Accessibility Services Coordinator</u>. If you need a Sign Language Interpreter, complete the form at <u>web.spcollege.edu/survey/664</u>. View the <u>Learning Resources</u> site.

**Tutoring:** Students should talk to their professor if they need additional assistance. Further tutoring is available through the Learning Resources (including 24/7 online tutoring through Tutor.com). These resources are FREE and may be helpful with writing (including APA format), math, and computer skills needed for this course. As the Academic Honestly policies state, students that receive assistance from a tutor must ensure all scheduled quizzes, homework, simulations, and exams are their own work. Tutors may assist with study plan practice problems and other similar problems only. View the <u>Learning Center Tutoring Schedules</u>.

This course includes on-demand study plan practice problem resources each week in the MyCourses Course Content to complete each assigned problem, as well as MyOMlab learning aids for each problem that supplement textbook explanations and examples (including Ask My Instructor help link).

**Libraries:** A list of SPC libraries is available online at: <a href="https://www.spcollege.edu/current-students/learning-resources/partnership-libraries">https://www.spcollege.edu/current-students/learning-resources/partnership-libraries</a>. The SPC Library and Services includes help with research, as well as Ask a Librarian which is part of the Florida Virtual Reference Service. Librarians can also help with APA citation tools and format for submissions.

**Academic Advising:** For assistance with academic planning for course sequencing, course selection, registration, transfer and other requirements, <u>contact an advisor</u>. All students should have completed SPC <u>SmartStart Course</u> for orientation (never too late).

**Career Services:** Includes internships and employment opportunities, as well as resume and interview assistance at <a href="https://www.spcollege.edu/current-students/student-affairs/student-support-resources/career-services">https://www.spcollege.edu/current-students/student-affairs/student-support-resources/career-services</a>.

**Retention Services:** Includes <u>Child Care Assistance</u> and also <u>various groups</u> that can help students be more successful in their studies.

**Titan Care Resources:** As an SPC student it's vital that you know <u>Titans Care</u> for collaborative resources available for students. Including <u>counseling services</u> for mental health or general life issues, <u>community resources for life issues</u> (substance abuse/crisis resources), free PSTA bus rides (<u>need current student ID</u>), and our food pantry program.

The SPC programs reinforce SPC's belief that supporting mental wellness is everyone's charge and that one loss as a result of substance abuse, mental illness, or suicide is one too many. If you or a loved one are considering suicide, please call the National Suicide Prevention Lifeline at 1-800-273-8255.

If you experience an extenuating circumstance beyond your control that is preventing you from maintaining Satisfactory Academic Progress (SAP) you may need to file an <u>SAP Appeal</u> to support financial aid eligibility.

**Veteran Services:** Includes a variety of services specifically for veterans at <a href="https://www.spcollege.edu/current-students/student-affairs/student-support-resources/veterans-services">https://www.spcollege.edu/current-students/student-affairs/student-support-resources/veterans-services</a>.

Campus Safety: For information on emergencies and other policies, see <a href="https://www.spcollege.edu/friends-partners/safety-and-security">https://www.spcollege.edu/friends-partners/safety-and-security</a>. Students on campus that need an escort to their car, or to report an issue on any campus, should call Campus Security at 727-791-2560.

View the Student Services site for further information and resources for student affairs.

## STUDENT SURVEY OF INSTRUCTION

The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

## **TECHNOLOGY**

## **Minimum Technology Requirements**

View the Technical Requirements for MyCourses.

SPC offers Microsoft Office software to current students at no additional cost. The software is available for both Windows and Mac computers. View the <a href="How to Download Microsoft Office 2016">How to Download Microsoft Office 2016</a> tutorial. Microsoft Excel may be used for course math and analytics.

This course also requires Adobe Reader (FREE) too (https://get.adobe.com/reader/).

See MyCourses Week 1 module regarding decision science software FREE to download in MyOMlab. POM for Windows and/or ExcelOM may be used for course math or analytics.

Additionally FREE technology tutorials are available through SPC partnership resources at <a href="https://mycoursessupport.spcollege.edu/technology-tutorials">https://mycoursessupport.spcollege.edu/technology-tutorials</a>. This includes computer and internet basics, as well as Microsoft Office. Master technology for your courses and career!

#### **Minimum Technical Skills**

Students should know how to navigate the course and use the course tools. Both MyCourses and Pearson MyLab are used for this course.

MyCourses tutorials are available to students new to this Learning Management System (LMS) of MyCourses at the bottom of the Course Content. Students should have completed the <u>Introduction to MyCourses</u> before taking this course (if not please follow link to access and complete ASAP). Most features in MyCourses are accessible on mobile devices, although it is recommended that you use a computer for quizzes/tests, math problems, and other assignments.

If an attachment cannot be opened by the instructor, students will be required to re-format and re-submit an assignment so that it can be evaluated and returned with feedback.

# **Technical Support**

Technical support is available 7 days a week via the SPC Technical Support Center.

# **Accessibility of Technology**

- MyCourses (Brightspace by Desire2Learn) Accessibility
- Google (YouTube) Accessibility
- Pearson MyLab Accessibility

## **Privacy**

- MyCourses (Brightspace by Desire2Learn) Privacy
- YouTube Privacy
- Pearson MyLab Privacy

**Instructional Continuity Plan – Emergency Preparedness Policy** 

To be prepared in the event of weather or other emergency disruptions, review the <a href="Emergency Preparedness">Emergency Preparedness</a>
<a href="Procedures for Students">Procedures for Students</a>. The St. Petersburg College website at <a href="www.spcollege.edu">www.spcollege.edu</a> is the official source of college information regarding the status of the institution. Other important information will be communicated via SPC Alert, local media outlets, and the college toll-free phone number 866-822-3978. All decisions concerning the discontinuation of college functions, cancellation of classes, or cessation of operations rest with the President or his/her designee. The College realizes that it is possible for a significant natural disaster to compromise SPC campus facilities sufficiently to disrupt the delivery of classes on campus/campuses for an extended period of time and is planning ways our operations can continue following such an emergency.

So, in the event that a hurricane or other natural disaster causes significant damage to St. Petersburg College facilities, you may be provided the opportunity to complete your course work late. Following the event, please visit the college website for an announcement of the College's plan to resume operations.

Further, in the event of such a disaster, the instructor will continue using the Learning Management System (LMS) of MyCourses for continuation of all required learning and instructional activities in this course, including the issuing of graded online assignments and expectation of student completion of those graded assignments.

Therefore, in order to keep up with all activities in this course during and after a natural disaster, please plan to continue this course by maintaining online access to MyCourses in lieu of meeting in a classroom (if applicable)—possibly through duration of the course's regularly scheduled end date. We will finish this course in MyCourses, as directed by your instructor online, and your instructor will use all graded assignments—both online and formerly on-campus—to assess and issue your final letter grade for this course, as normally planned, despite occurrence of the natural disaster.