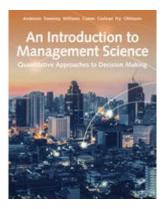


Quantitative Decision Making MGT 420\*93 Hybrid Room 112 Kelce Mondays 11:00 a.m. to 12:15 p.m. Spring 2023

 Instructor: Mrs. Shipra Paul, Instructional Professor
Office: 110K Kelce
Office Hours: Office Hours: Mondays 10:00 a.m. to 10:55 a.m. and 12:30 to 1:55 p.m. In-Person Tuesdays 10:50 a.m. to 12:15 p.m. and 1:50 p.m. to 2:50 p.m. In-Person Wednesdays 2:00 p.m. to 5:00 p.m. Virtual office hours by appointment Thursday 10:00 a.m.to 12:00 p.m. and Virtual office hours by appointment
E-mail: spaul@pittstate.edu

#### Required Textbook:

Anderson/Sweeney/Williams/Camm/Cochran/Fry/Ohlmann, <u>An Introduction to Management Science</u>, 15<sup>th</sup> ed.; Cengage Learning, Publishing, 2019



### **Catalog Course Description**

Quantitative and analytical approaches to management problems.

#### **Pre-requisites**

MGMKT 310 – Basic Quantitative Business Methods, "C" in MATH 143 - Elementary Statistics, and junior standing.

#### **Course Objectives / Learning Outcomes**

The purpose of this course is to extend the problem solving and analytical techniques you have developed in earlier quantitative courses. The objective is to learn to use the basic tools of operations research as applied to business/economic problems. Quantitative modeling of the real world and the tools and techniques of finding optimal solutions will be discussed. Topics include modeling and decision-making, linear programming, transportation problems, assignment problems, network analysis, Integer Linear Programming.

# **Course Outline**

<u>Chapter</u>	Topic
1	Introduction
2/4	An Introduction to Linear Programming
	Linear programming: Model Formulation
2	LP: The Graphical Approach
3	LP: Sensitivity Analysis and Interpretation of Computer Solution
6	Transportation, Assignment and Transshipment problems
7	Integer Linear Programming

The above schedule is <u>only a guide</u>. The instructor reserves the right to make any necessary changes as the semester progresses.

# **TEACHING METHODS:**

This course is designed to provide a hybrid experience, including both face-to-face and online activities. Online sessions will be self-paced. The instructor will post power point slides and chapters' hand out on canvas for students to review chapter materials. Face-to-face sessions will be held on campus. Students are expected to read chapter handout and PowerPoint slides before they come to face-to-face class so they can ask questions from those chapter materials and participate in class discussion.

It is highly recommended that students have a computer to access Canvas and complete assignments. Mobile devices are not normally recommended for submitting assignments and taking Canvas quizzes and exams. Click on the following link for finding type of Browser and computer requirements for Canvas.

Student computer recommendations can be found at <u>https://www.pittstate.edu/faculty-</u>staff/ files/documents/faculty-senate/documents/syllabus-supplement-spring-2023.pdf

**Note:** If you like to meet me individually via zoom, please email me in advance requesting for a zoom meeting during my posted office hours. I will provide you a zoom link through which we can have a meeting.

### **Academic Integrity**

All Pitt State students are bound by the academic integrity policies of the university as described and outlined in the current Syllabus Supplement:

https://www.pittstate.edu/faculty-staff/\_files/documents/faculty-senate/documents/syllabus-supplement-spring-2023.pdf

Please familiarize yourself with these rules and guidelines. In addition, as a course offered through the Kelce College of Business, students in this class are obligated to adhere to the college's Student Code of Ethics as outlined below. Students shall:

• Refrain from class disturbances.

• Arrive on time and remain until dismissed at all class sessions and to notify instructors in advance of anticipated absences, late arrivals, or early departures whenever possible.

- Turn off cell phones or other electronic devices while in class, unless permission to use them has been granted.
- Prepare for and participate in all classes.
- Treat fellow students, staff, faculty and administrators with respect.
- Prepare assignments and exams honestly.
- Avoid plagiarism or unacknowledged appropriation of another's work in any academic work. Refrain from giving or receiving inappropriate assistance.
- Dress appropriately, avoiding clothing that is revealing, provocative, or includes offensive language or visuals. Dress as a professional when appropriate at ceremonies and interviews.
- Respect University property and use resources in the most effective and efficient manner.
- Be fair and constructive in the evaluation of faculty.
- Obey the policies, regulations, and laws of the United States of America, The State of Kansas, The Kansas Board of Regents, Pittsburg State University and the Gladys A. Kelce College of Business.

## **Students with Disabilities**

Please inform the instructor if you have a learning or physical disability that interferes with course requirements. Assistance and/or appropriate accommodations may be available through the contacts listed on the following current Syllabus Supplement: <u>https://www.pittstate.edu/faculty-staff/\_files/documents/faculty-senate/documents/syllabus-</u>supplement-spring-2023.pdf or contact instructor.

## **Course Evaluation Methods**

**Assignments:** A student can easily learn the materials and test his/her understanding by working problems. Accordingly, problems will be assigned to be turned in for a grade. These assignments will enable students to review course materials more frequently and prepare for upcoming exams.

**Homework assignments** for this course will be submitted electronically through Canvas. Late, incomplete, or missing assignments will not be given credit. It is the responsibility of the student to keep track of their assignments, including the submission time and date. It is student's responsibility to ensure that instructor receives assignment on time. If you're having technology problems, plan ahead. Internet access is available on campus. If you are having trouble completing an assignment on time, please contact instructor by email before the assignment is due to make alternate arrangements.

**Exams:** There will be three exams including comprehensive **final. Exams will comprise of multiple choices questions and problems**. Exams will be administrated on-line using CANVAS. There will be a time limit set for each Exam. **Students will have only one chance to complete exam once started.** 

Students must take the test the date is given. If students miss test without prior permission, the instructor will determine if the student may take the test late. If a student is allowed to take the test late, student will automatically have **10 points subtracted from their score regardless** of the reason for missing the test. Therefore, if a student knows that they must miss a test day or time, they should ask the instructor in advance if it is possible to take the test at the different time or date in order to be allowed to earn the full credit for the test.

**Grading:** The letter grade you earn in this course is determined by the total points you earn on homework, discussion and exams. The distribution of points is provided below:

Items	Weight
Assignments	-
and Attendance	30%
Exam 1	20%
Exam 2	20%
Final Exam (Comprehensive)	30%
Total	100%

The final letter grade in this course is determined by the total points you earn through the semester. The basic guideline is as follows:

90% or above of	of the <u>highest</u> :	Α
80% or above	"	В
70% or above	"	С
60% or above	"	D
below 60%	"	F

#### GRADES

You can view your grades using the GRADES button in the **course navigation links.** Check your grades regularly to make certain that you have grades for all of your assignments and tests. Email me at <u>spaul@pittstate.edu</u> if you have a question about a grade or a question about any chapter materials. My goal is to respond to your messages as soon as possible.

### **Tentative Exam Date**

Exam 1 February 20, 2023 Exam 2 April 03, 2023 Final Exam May 10, 2023

*Note: The instructor reserves the right to amend and reorganize this syllabus at any time.*