

SYLLABUS

BUS 480—QUANTITATIVE METHODS

REQUIRED TEXTBOOK:

Quantitative Methods for Business Decisions by Anderson/Sweeney/Williams, 10th edition

COURSE DESCRIPTION:

This course introduces the basic concept of quantitative approaches to decision making. It is designed to provide students with a sound conceptual understanding of the role that management science plays in the decision making process. It emphasizes the application of a wide variety of quantitative techniques to the solution of business and economic problems.

COURSE GOAL

1. Understand the relevant principles of quantitative methods
2. Understand quantitative analysis of problem solving
3. Identify and define the problem
4. Determine the set of alternative solutions
5. Understand complexities of decision making

COURSE OBJECTIVES:

1. To provide students with a sound understanding of the conceptual frame work of quantitative methods in the decision making process..
2. To prepare students for real-world applications.
3. To help students acquire the ability to calculate probability distribution, expected value and sampling.
4. To help students comprehend and apply the principles of forecasting using past data and times series analysis.
5. To help students become familiar with inventory decisions with certainty and uncertainty factors.
6. To acquaint students with understanding of linear programming formulation and computer solution.
7. To help students comprehend logical solutions for project planning with PERT.

COURSE OUTLINE:

<u>Week</u>	<u>Topics</u>
Chapters: 1, & 2	1 – 3 Review of Mathematical models Problem Solving and Decision Making Introduction to Probability, Probability Distribution, etc.
7 – 8	4 – 8 Introduction to Linear Programming Maximization problem, minimization Problem, Objective Function, Linear programming and applications.
8	9 – 11 Introduction to forecasting methods, Components of time series, Trend projection, Trend and seasonal Components, Calculating Seasonal Indexes, Regression Analysis, and Quantitative Approaches.
10, 12, & 14	12 – 13 Transportation Problem, .PERT, Project Scheduling and Management
15 -16	14-16 Simulation, and Markov Process

COURSE REQUIREMENT:

1. Attend all classes.
2. Do all project assignment
3. Submit homework assignment on time
4. All students must complete faculty/course evaluation on line toward the end of semester
5. All students are expected to utilize library resources in completing their assigned Project.

STUDENT CLASSROOM DDECORUM EXPECTATIONS:

To enhance the learning atmosphere of the classroom, students are expected to dress and behave in a fashion conducive to learning in the classroom. More specifically, students will refrain from disruptive classroom behavior i.e. talking to classmate, disrespectful Responses to teacher instructions; swearing; wearing clothes that impede academic learning such as but not limited to, wearing body-revealing clothing and excessively baggy pants; hats/caps, and/or headdress. Students will turn off telephones prior to entering the class room. Students who exhibit the behaviors describe above, or similar behavior will be immediately dismissed from class at the third documented offense. The student will be readmitted to class only following a decision by the Department chair. The student may appeal the decision of the department chair to the Dean of the College offering the course, and, subsequently, to the Office of the Vice President for Academic Affairs, and then to the President of Shaw University. The decision of the President will be final. Failure to follow the Procedures herein outlined will result in termination of the appeal, and revert to the decision of the department chair.

Each behavior construed by the teacher/professor as non contributive to learning will be recorded, properly documented and appropriately reported to the student and to the Chair of the academic department offering the course. The report will be in written form with a copy provided to both the student and the department chair. The faculty member should retain a copy for his/her own records.

GRADING

Four tests weighted at 25% each 100%(Research project may be required)

Grading Scale:

90 – 100: A; 80 – 89: B; 70 – 79: C; 60 – 69: D; Below 60: F.