Wharton County Junior College

Administrative Master Syllabus

Course Information

Course Title	Business Statistics
Course Prefix, Num. and Title	BUSI 2305 Business Statistics
Division	Technology and Business
Department	Business Office Technology
Course Type	Academic General Education Course (from ACGM, but not WCJC Core)
Course Catalog Description	Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. (BUSI 2305 is included in the Business Field of Study.)
Pre-Requisites	MATH 1324 or MATH 1314; BCIS 1305
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours	3:3:0
Equated Pay Hours	3
Lab/Other Hours Breakdown: Lab Hours	0
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Department Head:	Celine Siewert, Business Office Technology Program Director	06/01/2025
Division Chair:	David Kucera, Technology & Business Division Chair	06/01/2025
VPI:	Leigh Ann Collins Digitally signed by Leigh Ann Collins Date: 2025.07.08 12:17:00 -05'00'	

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Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

1. Data and statistics
2. Descriptive statistics: tabular and graphical displays
3. Descriptive statistics: numerical measures
4. Probability
5. Discrete probability distributions
6. Continuous probability distributions
7. Sampling and sampling distributions
8. Interval estimation
9. Hypothesis tests
10. Inference about means and proportions with two populations
11. Inferences about population variances
12. Test of goodness fit, independence, and multiple proportions
13. Experimental design and analysis of variance
14. Simple linear regressions
15. Multiple regression

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

- Describe the random processes underlying statistical studies.
- Calculate and use probability in solving business problems.
- Compute descriptive statistics, construct graphs for data analysis, and interpret outcomes.
- Compute and interpret measures of central tendency and dispersion.
- Calculate expected values to evaluate multiple outcomes of a decision.
- Describe, interpret, and apply discrete and continuous probability distributions.
- Construct and interpret confidence intervals for means and proportions.
- Formulate, perform, and interpret hypothesis tests (one and two population parameters).
- Calculate, evaluate, and interpret simple linear correlation/regression.
- Use statistical software to graph, compute, and analyze statistical data.

Methods of Assessment:

- Unit Exams
- Comprehensive Final Exam
- Homework
- Class Exercises/quizzes/projects

Required text(s), optional text(s) and/or materials to be supplied by the student:

Latest edition of Business Statistics: Communicating with Numbers, S. Jaggia, A. Kelly, McGraw Hill Education

Suggested Course Maximum:

35

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List any specific or physical requirements beyond a typical classroom required to teach the course.

None

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Homework assignments..... 10-25%
Class exercises/quizzes/projects..... 10-30%
Unit Exams 40-60%
Comprehensive Final Exam 10-20%

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = 59 or below

Curriculum Checklist:

☒**Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.

☐**Administrative WCJC Core Course**. Attach the Core Curriculum Review Forms

- ☐Critical Thinking
- ☐Communication
- ☐Empirical & Quantitative Skills
- ☐Teamwork
- ☐Social Responsibility
- ☐Personal Responsibility

☐**WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist