

# STAT 3123

## Statistics for Accounting and Business

### Course Description

Elementary descriptive and inferential statistics. The course will include an understanding of concepts and practices related to basic data analysis, probability and statistics, including parametric statistical tests. An accounting and business orientation is used to illustrate data analysis and interpretation of experimental results. Microsoft Excel will be used in the course. Microsoft Excel 2007 or higher will work with this course.

### Course Prerequisites

Any MATH course and CPSC 1103 or higher and a minimum of 60 credit hours of coursework completed.

### Required Materials

Larson, Ron & Faber, Elizabeth (2018). *Elementary Statistics: Picturing the World*. (7<sup>th</sup> ed.). Upper Saddle River, NJ:Prentice-Hall. ISBN: 9780134683416

Required Supplemental Materials: Access code to MyStatLab. Directions on accessing the course available in Canvas

### Accreditation

Southern Wesleyan University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate, baccalaureate, and masters degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of Southern Wesleyan University.

### Program Learning Outcomes

Students completing the Bachelor of Science (BS) in Business Administration are expected to:

<b>PLO#1</b>	Be effective communicators in both oral and written communication.
<b>PLO#2</b>	Demonstrate leadership in effective collaboration, interacting and contributing as a team member to meet stated goals.
<b>PLO#3</b>	Demonstrate the ability to articulate the impact of corporate social responsibility for business and society.

<b>PLO#4</b>	Demonstrate a clear perception of business ethics based on Christian principles and apply leadership skills that reflect Christian servant leadership principles.
<b>PLO#5</b>	Be capable problem-solvers using various analytical tools and technology to effectively frame and solve problems.
<b>PLO#6</b>	Possess appropriate knowledge in the main functional areas of business: accounting, business law, economics, finance, management, marketing, statistics, and strategy.

## Course Learning Outcomes

Upon successful completion of this course, each student will be able to:

		<b>Aligns with</b>
<b>CLO#1</b>	Identify and apply the proper descriptive techniques to represent data.	<b>PLO(s)#5,6</b>
<b>CLO#2</b>	Apply the principles of classic and conditional probability appropriately to real-world situations.	<b>PLO(s)#5,6</b>
<b>CLO#3</b>	Evaluate when and how to apply the various probability distributions.	<b>PLO(s)#5,6</b>
<b>CLO#4</b>	Analyze information to find the appropriate level of statistical significance and construct confidence intervals.	<b>PLO(s)#5,6</b>
<b>CLO#5</b>	Conduct a hypothesis test on data samples to evaluate the validity of claims.	<b>PLO(s)#5,6</b>
<b>CLO#6</b>	Interpret and analyze data using regression analysis, testing the validity of the model, and forecasting future results.	<b>PLO(s)#1,5,6</b>
<b>CLO#7</b>	Apply statistical analysis to real-world cases while integrating a faith-based perspective.	<b>PLO(s)#1,3,4,5,6</b>

## Course Learning Assignments and Assessments

### Grading

Discussions and Devotions	10 %
Case Studies	20 %
Homework	35 %
Quizzes	20 %
Final Project	15%
<b>Total</b>	<b>100%</b>

## **Discussions and Devotions – 10%**

Students are expected to complete the assigned readings prior to each posting in order to be prepared for the discussion forums. Active participation in each online discussion and devotion is essential to success in the course. For both the devotion and the discussion, students are expected to post an initial response and at least two responses to classmates/ faculty by the end of the week in each prescribed discussion forum. Postings must be of appropriate length and add value to the discussion topic.

Guidelines for Devotions and Discussions:

- Each student is expected to participate each week and participation is used to determine attendance.
- Each student is expected to make an original post to each discussion forum topic and to post a reply to at least two other students and respond to faculty questions in each discussion forum including the devotion.
- Initial postings are due on Thursdays by 11:59 p.m. and responses to peer comments are due on Sundays by 11:59 p.m.
- Discussion grading rubrics are available on each discussion assignment

## **Individual Case Studies – 20 %**

There are two individual case studies. These are to be written as individual papers that address specific questions as provided. The following guidelines should be used for written reports submitted by individuals:

- The length of the report will be important to fully explore and discuss a topic. Cover sheets and reference pages do not contribute to the page number count.
- The report should be typed, double-spaced, front side only, in Times New Roman 12-point font. Titles, etc., can be in a larger font size.
- Students must follow APA format for proper grammar, spelling, sentence/paragraph structure, and a footnote or endnote structure. All cases are to be written in the third person as a professional paper.
- A cover sheet should include the student's name, course number, the report title, faculty member's name, and the date submitted. A hardback cover for the report is not required. All papers will be submitted via Canvas, and TurnItIn will verify that the work is original.
- If sources are used, a reference page is required.
- Titles for each section may be used if the student desires.
- The assignments reference specific questions that should be answered on the topic. The answers do not have to be in the same order as in the textbook but should be logically organized.

**Topic**

**Due**

Probability: United States Congress  
Confidence Intervals: Marathon Training

Week 2  
Week 5

### **Homework – 35%**

Homework problems are assigned with the chapter readings. The following guidelines should be used for homework submitted by individuals:

- Complete the assignments in MyStatLab following the directions for each question correctly.
- If a numerical answer is required, enter larger numbers with decimals to at least 2 decimal places and smaller numbers (like probabilities) to 4 decimal places unless otherwise directed by the question. Not following these directions may cause some answers to be marked incorrect. If a question has different directions, be sure to follow the directions with the question instead of these directions.
- Homework must be submitted by the end of each week on MyStatLab. You will have three attempts before the due date for each homework assignment.

### **Quizzes – 20%**

There are two short quizzes in this course, each with equal weight. They will be complete in MyStatLab during the week they are assigned covering all of the topics in the chapters specified on the quiz. You may use your notes, textbooks, and computer software (such as Microsoft Excel) to take the quiz but must do the work on your own otherwise.

### **Final Project– 15%**

The purpose of this assignment is to provide an opportunity to apply the concepts in a real-life situation and in the process, develop analytic and practical skills. The data for this project is available in Canvas. This assignment is similar to the case studies in that it will be an opportunity to demonstrate your ability to apply statistical analysis in a written format. Unlike the case studies, there is flexibility in the variables you wish to explore in the paper. The paper should be APA formatted with a cover page and reference sheet but no abstract should be included. For a rubric and more detailed explanations of the assignment, see the [Final Project](#).

## **GRADE EQUIVALENCY TABLE**

All grades are reported in a system of eleven letter grades designated as “A” through “F” with appropriate plus and minus additions reflecting the following scheme:

Percentage Value	Letter Grade	Numeric Value for GPA
93-100	A	4.0
90-92	A-	3.7
86-89	B+	3.4
83-85	B	3.0
80-82	B-	2.7
76-79	C+	2.4
73-75	C	2.0
70-72	C-	1.7
65-69	D+	1.4
60-64	D	1.0
<60	F	0.0

## Course Policies

### Attendance Policy

Regular attendance is a key to success in the course. Please refer to the Attendance Policy outlined in the Catalog for full details of the SWU policy on attendance.

Online attendance is based on completion of at least one designated assignment by the due date/time posted on the course site for each session. Online activities may include lecture, assignments, readings, discussion forums, and assessments (e.g. quizzes, tests).

### Late Assignment Policy

#### Assignments

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Assignments are due by midnight on the days specified. **Students can expect a 20% reduction of their grade for each day an assignment is late.** Students who submit assignments more than four days late will receive a grade of zero on the assignment.

In the case of extenuating circumstances (such as hospitalization, childbirth, major accident, injury or bereavement), it is the responsibility of students to contact the instructor as soon as practicable. The instructor may waive the late penalty if the circumstances are justified.

Students must submit final course assignments no later than the last day of the term. No assignments are accepted after the last day of the term.

## **Discussions**

Students must submit discussion board postings during the time frame indicated. Discussion board submissions will not be accepted for credit after the deadline.

## **Communication**

The course site (Canvas) and SWU email are the primary tools for class communication, assignments, handouts, etc. All participants must have access to the course site and SWU e-mail and are expected to access them on a daily basis.

While it is important to maintain good communication with the instructor, Internet connectivity problems and home computer problems are not considered adequate excuses for missing assigned class work.

## **Technology Requirements**

To be successful in this course, all participants are expected to ensure their technology equipment meets the [recommendations](#) provided by SWU's Technology Services.

Students requiring technical support related to their courses or other SWU-provided technologies should send an e-mail to [helpdesk@swu.edu](mailto:helpdesk@swu.edu) or call 864.644.5050.

## **Academic Honesty**

Honesty in all matters - including honesty in academic endeavors - is a valued principle at Southern Wesleyan University. It is the expectation of the university that all those joining the academic program will act with integrity in all matters.

No forms of academic honesty will be tolerated. Students are encouraged to help each other maintain these high standards. All academic dishonesty should be reported to the faculty directly. Faculty, upon evidence of academic dishonesty (cheating, plagiarism, or misuse of another's intellectual property), either by voluntary confession, report of another student, or on the basis of work submitted, must follow the procedure outlined in the Catalog (under *Academic Honesty*). This includes but is not limited to a zero for the work involved, 10% course grade reduction, or a failing grade for the course. Unresolved cases may be appealed using the Appeal Process outlined in the Catalog (under *Academic Honesty*).

## **Accommodations for Students with Disabilities**

Southern Wesleyan University is committed to providing equitable access to learning opportunities for all students. Accommodations can be made for students with disabilities, as outlined in “Services for Students with Disabilities,” found in mySWU’s Student tab under The Learning Center. Any student desiring accommodations must send the request and all documentation to the Academic Coordinator at the learning site where he/she attends classes. The Academic Coordinator will forward the materials to the Student Success Coordinator for Southern Wesleyan University.