

Master Syllabus Template

All courses require a syllabus. Syllabi may be photocopied and/or posted on the class Blackboard Companion site. Faculty must review the course syllabus with students on the first day of class.



Keiser University
General Education

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| <u>Course Prefix & Number:</u> | STA 3163 |
| <u>Course Title:</u> | Intermediate Statistics |
| <u>Course Format:</u> | Face to Face, Online |
| <u>Credit Hours:</u> | 3.0 |
| <u>Course Schedule:</u> | |
| <u>Prerequisites:</u> | STA 2023 |
| <u>Co-requisites:</u> | None |
| <u>Faculty:</u> | xxx-xxx-xxx Ext. -----@keiseruniversity.edu |
| <u>Office Hours:</u> | |
| <u>Course Description:</u> | This course presents tools for the analysis of data. Specific topics include: normal distribution, tests of means, proportions, ANOVA, regression, multiple regression, correlation, and nonparametric methods. A computerized statistical tool is used in the course for data analysis. |
| <u>Program Goal(s):</u> | Perform quantitative calculations related to the student's chosen field of study. Describe algebraic concepts generally applicable in work environments involving algebraic expressions. |

Course Objectives:

Upon Completion of the course, the student will be able to:

- 1 Identify the qualities of a nonparametric test.
- 2 Use one set of sample data to test a hypothesis or claim about a population parameter utilizing methods in inferential statistics
- 3 Extend the methods for estimating values of population parameters and the methods for testing hypotheses to situations involving two sets of sample data
- 4 Use methods for determining whether a correlation between two variables exists and whether the correlation is linear
- 5 Identify an equation that best fits the data
- 6 Predict the value of one variable given the value of the other variable
- 7 Use methods for analyzing differences between predicted values and actual values
- 8 Use methods for identifying linear equations for correlations among three or more variables
- 9 Use methods for developing a mathematical model to describe nonlinear correlations between two variables
- 10 Test for equality of three or more population means by using the method of one-way analysis of variance
- 11 Compare populations separated into categories by using the method of two-way analysis of variance
- 12 Perform the sign test and interpret the results.
- 13 Perform the Wilcoxon signed ranks test for matched pairs and interpret the results
- 14 Perform the Wilcoxon rank-sum test for two independent samples and interpret the results
- 15 Perform the Kruskal-Wallis test and interpret the results
- 16 Compute the rank correlation r_s and use it to test for an association between two variables.
- 17 Implement the above inferential techniques using a statistics package such as a graphing calculator, Excel, Minitab, Stat disk, SAS, SPSS, R, or a comparable program.

Grading and Evaluation Methods:

| Item | Percent Total Grade | Due Date |
|----------------------|---------------------|----------|
| Tests | 60% | |
| Assignments/Projects | 15% | |
| Final Exam | 20% | |
| Post test | 5% | |
| | 100% | |

Grading Scale

| Letter Grade | Numeric Grade |
|---------------------|----------------------|
| A | 90.00-100.00% |
| B | 80.00-89.99% |
| C | 70.00-79.99% |
| D | 65.00-69.99% |
| F | Up to 64.99% |

Required Textbook:

Triola. (2018). *Elementary Statistics, 13/E*, w/MyStatLab, Pearson ISBN 9780134886299

Topical Outline/Course Assignments/Calendar:

Course Assignment Format is to provide evidence of mastery of the course objectives which are linked to specific program goals and outcomes. Please see attached for an example of this format. (See Attached)

Course Guidelines and Policies*

**Faculty course guidelines must not contradict standard University or Program policies as stated in the University Catalog, Program Student Handbook and/or Program Manual.*

Additional guidelines and pre-approved policies may be included, examples appear below. The University Department Chair (UDC) should be consulted prior to making changes in the verbiage or adding additional policies. Any policies included in the syllabus should fit with the “students first” philosophy, and compliment the mission of the University and the program.

Academic Integrity

Students are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. Plagiarism, cheating and other misconduct are serious violations and will not be tolerated, and may result in academic penalties, including suspension or dismissal.

Missed Tests/Quizzes

Makeup exams will be allowed only with pre-approval of the instructor or with an acceptable, documented reason. Acceptable reasons for makeup exams include severe illness, family emergency or other unavoidable events. Exam format for makeup exams may be different than the original exam but the content for the exam will not change.

Late Assignments

Assignments are due at the start of class on the day noted. Late assignments without penalty will be accepted only in cases of emergency. Students should discuss turning in late work directly with the instructor and in advance of the due date whenever possible. Late assignments will not be accepted if the assignment has already been graded and returned to the class.

Civility/Professionalism

This class is a community of learners, which means we will depend upon each other for support and information. In order to learn, we must be open to the views of people different than ourselves. Please honor the uniqueness of your classmates and appreciate the opportunity we have to learn from one another. Please respect each other's' opinions and refrain from personal attacks or demeaning comments of any kind.

It is of the utmost importance to communicate with courtesy and professionalism. Professional courtesy includes respecting other's' opinions, being courteous and respectful, and working together in the spirit of cooperation.

University and Program Policies

Students are expected to abide by the policies set forth in the University Catalog and the Student Program Handbook/Manual. The University Catalog is available electronically at <http://www.keiseruniversity.edu/catalog/>. The Program Student Handbook/Manual is available electronically at the direction of your instructor.

Disability Accommodations:

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must complete the application process and receive approval from the review committee. The first step is to consult with the Campus President or Dean of Academic Affairs.