

This is a sample syllabus for STA2122. Students should reference the section syllabus provided at the beginning of the semester for specifics regarding assignments and grade assignments.

**STA 2122 – INTRODUCTION TO APPLIED STATISTICS**  
**MODE OF INSTRUCTION: TRADITIONAL**

**Instructor:**  
**Email:**  
**Office:**  
**Phone:**  
**Office Hours:**  
**Course Location/Website:**

**Syllabus Change Policy**

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

**COURSE DESCRIPTION:**

**Prerequisite:** A grade of “C-“ or better in MAC 1105 College Algebra (or equivalent).

**Credit Hours:** 3

**Special Note:** No credit given for STA 2122 if a grade of “C-“ or better is earned in STA 2171, STA 3032 or QMB 3200.

The course covers Normal distributions, sampling variation, confidence intervals, hypothesis testing, one-way and two-way analysis of variance, correlation, simple and multiple regression, contingency tables and chi-square tests, non-parametric statistics.

The purpose of this course is to prepare students for further study and job preparation in the field of Natural Sciences. It will emphasize understanding of data and interpretation of statistical analyses. It will require students to think of data, and report the results of their analyses, in context.

**COURSE OBJECTIVES:**

This course has been approved to meet FSU’s Liberal Studies **Quantitative and Logical Thinking** requirements and is designed to help you become a critical analyst of quantitative and logical claims. In order to fulfill the State of Florida’s College mathematics and computation requirement the student must earn a “C-” or better in the course.

By the end of the course, students will demonstrate the ability to:

- (1) Select and apply appropriate methods (i.e., mathematical, statistical, logical, and/or computational models or principles) to solve real-world problems.
- (2) Use a variety of forms to represent problems and their solutions.

*The above two competencies will be assessed in the Liberal Studies Quantitative Assessment for STA 2122, which includes a written summary of results.*

- (3) Use descriptive statistics and graphical methods to summarize data accurately.
- (4) Use inferential statistics to make valid judgments based on the data available.
- (5) Select the appropriate statistical tools to analyze a particular problem.
- (6) Describe the goals of various statistical methodologies conceptually.
- (7) Develop a healthy skepticism toward statistical studies and their results based on a sensible consideration of the techniques employed.

**COURSE MATERIALS:**

**Instructional Technologies:**

- ~ Calculator: TI-84 Plus or equivalent type
- ~ Textbook: The Basic Practice of Statistics, 7th ed. by Moore Notz Fligner

**Concerning Required Readings:** You will need to read certain sections of the textook - sections will be specified on the course website. You will also need to read some course notes that will be posted on the University learning management system. Hardcopies of the course notes will not be provided.

**COURSE ASSIGNMENTS AND EVALUATION:**

**Quizzes (50%):** 6 quizzes given in recitation. You may use a calculator, an 8½”x11” notesheet, statistical tables and scratch paper. You may not share calculators and you may not use a cell phone as a calculator. The quizzes are not cumulative in nature.

**Activities (20%):** 6 group activities given in recitation. For each activity, you will get 100% for being present and participating, 50% for being present but not participating and 0% for being absent. Also, if you arrive more than 15 mins late or leave more than 15 mins early you will only get 50%.

**Final Exam (30%):** the final exam is cumulative.

**GRADE CALCULATION:**

Quiz Average	50%
Activity Average	20%
Final Exam	30%

**GRADING SCALE:**

A	[93%, 93% or above]	C	[73%, 77%)
A-	[90%, 93%)	C-	[70%, 73%)
B+	[87%, 90%)	D+	[67%, 70%)
B	[83%, 87%)	D	[63%, 67%)
B-	[80%, 83%)	D-	[60%, 63%)
C+	[77%, 80%)	F	[0%, 60%)

**COURSE SCHEDULE:**

WEEK	TOPICS TO BE COVERED
1	Graphs, Summary Statistics
2	Normal Distributions
3	Central Limit Theorem
4	One-sample Confidence Intervals
5	One-sample Hypothesis Tests
6	One-sample Hypothesis Tests
7	One-way Anova

8	Two-way Anova
9	Correlation, Simple Linear Regression
10	Simple Linear Regression
11	Multiple Regression
12	Contingency Tables
13	Chi-Square Tests
14	Nonparametric Statistics
15	Nonparametric Statistics
16	<b>Final Exam</b>

### **University Attendance Policy:**

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **Academic Honor Policy:**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>.)

### **Americans With Disabilities Act:**

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the: Student Disability Resource Center

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

sdrc@admin.fsu.edu

<http://www.disabilitycenter.fsu.edu/>