

STA 2023 - Elementary Statistics - Syllabus - ONLINE

Study Abroad Israel - Travel Dates: 5/13 – 5/27/2019

Section # **XXXX**

Semester Code: **XXXX**

Start and End Dates: 4/5 – 5/27/2019

Semester and Year: **Summer 2019**

INSTRUCTOR

Name: Dr. Lakshminarayan Rajaram

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Office Location: Tarpon Springs - BB 023

Phone: 727-712-5242

Office Hours: Please refer to my office hours schedule uploaded in MyCourses

Instructor Web Page: Please copy and paste the following URL in a new browser

<http://www.spcollege.edu/instructors/id/194>

ACADEMIC DEPARTMENT

Dean: Jimmy Chang

Office Location: St. Petersburg/Gibbs Campus - SA 215B

Office Phone Number: (727)341-4305

Email: Chang.Jimmy@spcollege.edu

Academic Chair: Beth Goodbread

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COURSE INFORMATION

Course Description: This course includes concepts taken from topics which include descriptive statistics, measures of central tendency and dispersion, probability, probability distributions, sampling distributions, binomial distribution, normal distribution, the student's t distribution, the Chi-square distribution, estimation using confidence intervals, hypothesis testing, linear regression, correlation, and nonparametric statistics. Credit is only given for STA 2023 or STA 2023H, but not both.

Course Goals: This class is taught using a software program called MyStatLab. *Your instructor will not be giving any in-class lectures as the subject matter is delivered by your interaction with the computer software.* Keep in mind this is neither a self-paced nor an independent study class; it is a guided student-centered, computer-delivered full course curriculum. As it is your primary instruction for this course, you are expected to follow the sequence of modules within each lesson and complete your lessons and tests by following the schedule. Be sure not to fall behind this schedule as it is difficult to catch up. There are deadlines established to assist you in completing this course in a timely manner.

Syllabus Addendum: www.spcollege.edu/addendum

Major Learning Objectives and Outcomes:

1. The student will utilize descriptive statistics by:

- a. developing basic statistical literacy.
- b. using samples to make inferences about populations.
- c. identifying the most commonly used data collection techniques and sampling methods.
- d. constructing and interpreting graphical displays of data.
- e. calculating and interpreting measures of central tendency, dispersion, and relative standing.

2. The student will utilize probabilistic theory to make statistical inferences by:

- a. employing basic terminology of probability.
- b. applying basic rules of probability.
- c. constructing a sample space to find probabilities of a given simple or compound event.
- d. calculating probabilities of simple and compound events.

3. The student will utilize fundamental concepts of random variables and sampling distributions as they apply to statistical inferences by:

- a. identifying a random variable as being discrete or continuous.
- b. calculating probabilities of given events which follow binomial and normal distributions.
- c. applying the Central Limit Theorem.

4. The student will apply fundamental concepts of confidence intervals and hypothesis tests to practical problems in today's society by:

- a. estimating population parameters with confidence intervals using the student t distribution applied to population means.
- b. estimating population parameters with confidence intervals using the normal distribution applied to population proportions.
- c. conducting a hypothesis test using the student t distribution applied to population means.
- d. conducting a hypothesis test using the normal distribution applied to population proportions.
- e. conducting a hypothesis test using the chi-square distribution.
- f. interpreting Type I (alpha) and Type II (beta) error.

5. The student will apply the basic principles of simple linear regression and correlation as well as their applications to practical problems in today's society by:

- a. constructing and interpreting scatterplots.
- b. computing and interpreting the least squares regression equation, the Pearson product moment correlation coefficient and the coefficient of determination.
- c. using a linear regression equation to appropriately predict the value of a response

variable.

6. The student will apply basic principles of nonparametric tests by:

- a. recognizing the conditions for appropriate usage.
- b. conducting a hypothesis test.

The student will have to successfully complete 70% of these objectives on written tests in order to pass the course with a grade of C or better.

Prerequisites:

MAT 1033 with a minimum grade of C (recommend completion within the last two years) **or**

MAT 1100 with a minimum grade of C (recommend completion within the last two years) **or**

appropriate score on the SPC mathematics placement test

Availability of Course Content: Course content will be available upon successful completion of the Syllabus Quiz located in the Begin Here module. With the exception of the midterm and final exams, all course assignments will be immediately available. Please feel free to work ahead. However, be mindful of due dates. All assignments must be completed by their respective due dates.

No Make-ups:

Please note that there are no extensions of due dates or make-up for the homework (in MyStatLab), chapter quizzes (in MyStatLab), module tests (in MyCourses), proctored midterm exam (in MyCourses) and proctored final exam (in MyCourses).

It is the responsibility of all students to have a reliable and strong internet connection when taking the proctored exams, and also when doing the other course activities that require internet connection.

Other Critical Course Expectations:

The midterm and final exams are proctored. It is your responsibility to designate a proctor. This is required for every student in the course and it is expected that you do so in a timely manner. It is ill-advised to wait until the last moment to schedule your midterm or final because any problems can result in missing the opportunity to actually take the exams. You can find more information about proctored exams by clicking on the link below.

Proctored Testing Information:

<https://mycoursessupport.spcollege.edu/proctored-testing-information>

REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION

Required Textbook:

Essentials of Statistics with MyStatLab Access Code by Triola (6th Edition)

MyStatLab with e-book: ISBN: 9780134870113

MyStatLab with paperback: ISBN: 9780134858517

Required Calculator:

Minimally, a square root function is required but a TI-83 or TI-84 is strongly recommended. Calculators with CAS technology, such as the TI-nspire or TI-89, will not be permitted during proctored testing.

LEARNER SUPPORT

Bookstore: www.spcollege.edu/textbooks

Library: www.spcollege.edu/libraries

Accessibility: www.spcollege.edu/dr

Academic Support Services: www.spcollege.edu/support

On-Campus Support: www.spcollege.edu/tutoring/#tab=2

Online Support: www.spcollege.edu/tutoring/#tab=3

Student Services and Resources: www.spcollege.edu/services

IMPORTANT DATES

Drop Date:

XX/XX/XXXX

Proctored Midterm Window:

XX/XX – XX/XX/XXXX

Withdrawal Date:

XX/XX/XXXX

Proctored Final Window:

XX/XX – XX/XX/XXXX

Financial Aid Dates: www.spcollege.edu/pages/dynamic.aspx?id=800

College Calendar: <http://www.spcollege.edu/calendar/>

ATTENDANCE

The College-wide attendance policy is included in the Syllabus Addendum:

www.spcollege.edu/addendum/#attend. The policy notes that each instructor is to exercise professional judgment and define “active participation” in class (and therefore “attendance”), and publish that definition in each syllabus.

For this class, “attendance” is defined as completing the assigned coursework according to the schedule. Although this online course does not involve regular on-campus class meetings, it is expected that you will access course content and communicate with the class on a regular basis. Students are expected to complete assignments on time. Attendance will be taken during the first two weeks of class. If you don’t attend during the first two weeks of a term you will automatically be withdrawn from the class and this can cause serious problems if you receive financial aid. In fact, if you withdraw prior to completing 60% of a class and receive any form of federal financial aid (grants or loans) you will be required to repay a portion. So if you are thinking of withdrawing, please speak with your financial aid counselor.

(Please note that withdrawals from this class can only be initiated by the student. The instructor cannot withdraw you from the class.)

Attendance will also be taken during the week following the 60% point of the term. Attendance taken at this point of the term is also referred to as “active participation”. Active participation for this class is defined as responding to emails, posting to the discussion forums as required by your instructor and completing assignments by the required deadlines. More importantly, if a student fails to complete the Midterm by its respective due date, he/she will be classified as not actively participating. As a result, he/she will be administratively withdrawn from class, and given a WF in the course.

GRADING

Your course grade will be determined by the following components.

Component	Weight
Homework (in MyStatLab)	10%
Chapter Quizzes (in MyStatLab)	10%
Module Tests (in MyCourses)	10%
Midterm and Final Review (in MyCourses)	5% (bonus)
Midterm (in MyCourses)	35%
Final (in MyCourses)	35%

The grading scale is:

Percent	Grade
90-100	A
80-89.99	B
70-79.99	C
60-69.99	D
Below 60	F

Students must complete all assignments on or before the deadlines listed on the course schedule. A grade of zero will be assigned to any course requirement not completed. No official extra credit assignments are available. There will be no curving or rounding of grades in this class. Final grades will be documented based on the scale above.

Note: A grade of “C” or better must be earned in this course to satisfy the General Education Requirements for the AA degree.

State policy specifies that students may not repeat a college credit course for which a grade of “C” or higher has been earned except by appeal to the campus Academic Appeals committee. You may repeat a college credit course one time without penalty. At the third attempt, you will pay the full cost of instruction. The full cost of instruction rate for the academic year is stated in the course catalog. In addition, at the third attempt you may NOT receive a grade of “I,” “W,” or “X,” but must receive the letter grade earned. This grade will be averaged into your overall grade point average.

ASSIGNMENTS

Each of the six modules include a homework and quizzes delivered via MyStatLab and a Module Test within my|Courses. In addition, there is also a mandatory midterm and final as well as a midterm and final review. All assignments are available until the respective deadline and working ahead of schedule is permitted. No late homework, tests, or exams will be accepted, however, so make every attempt to stay on schedule. Furthermore, no make-up tests or exams will be given; they must be taken by the deadline. The use of handheld calculators, specifically the TI-83/84, is permitted for assignments and tests. Cell phones, tablets, computer software such as excel, and calculators with CAS such as the TI-89 and TI-nspire will not be permitted during proctored testing. PLEASE NOTE: The midterm and final exams are proctored.

STUDENTS’ EXPECTATIONS AND INSTRUCTOR’S EXPECTATIONS

Student Responsibilities: The student is responsible for knowing all course policies listed in the syllabus and discussed in class, participating online, respecting the rights of other students to learn, and communicating with others in a courteous and respectful

manner at all times, including the instructor. If you wish to request accommodations as a student with a documented disability, please make an appointment with the Learning Specialist on campus. In addition, ensure you notify your instructor of your accommodations at the beginning of the semester.

Instructor Responsibilities: The instructor is responsible for providing a syllabus the first day of class that clearly explains all course policies, providing a Student Survey of Instruction, posting grades in MySPC by the end of the semester, creating a learning environment that engages students and facilitates learning, enforcing the right of all students to learn, communicating with students in a courteous and respectful manner at all times, providing clear guidelines and information regarding when assignments are due, the format required, and the procedure for completing and submitting assignments, **grading all assignments within 7 days of each due date, and responding to emails within 48 hours.**

Online Student Participation and Conduct Guidelines:

www.spcollege.edu/addendum/#onlineguide

Academic Honesty: www.spcollege.edu/academichonesty

Netiquette: SPC has outlined expectations for student behavior and interaction for online discussions, email, and other forms of communication:

www.spcollege.edu/addendum/#expectations

STUDENT SURVEY OF INSTRUCTION

The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

TECHNOLOGY

Calculator Requirements: This course will minimally require a calculator that has a square root function but a TI-83 or TI-84 is strongly recommended. The TI-83 and TI-84 have enhanced statistical features which help with several tedious calculations encountered throughout the course. Furthermore, tutorials are included that are specific to the TI-83 and TI-84. **Cell phones, tablets, computer software such as excel, and calculators with CAS such as the TI-89 and TI-nspire will not be permitted during the proctored testing.**

Minimum Technology Requirements:

<https://mysuccess.helpdocsonline.com/technical-requirements-for-mycourses>

Minimum Technical Skills: Basic computer skills.

Accessibility of Technologies:

MyCourses (Brightspace by D2L) Accessibility Statement:

www.brightspace.com/about/accessibility

Pearson Accessibility Statement

<http://www.pearsonhighered.com/educator/accessibility/index.page>

Annenberg Learner Accessibility Statement

<http://www.annenbergfoundation.org/site-information/accessibility-statement>

YouTube Accessibility Statement:

<https://www.google.com/accessibility/>

Privacy:

MyCourses (Brightspace by D2L) Privacy Statement:

www.brightspace.com/legal/privacy

Pearson Privacy Policy:

<https://register.pearsoncmg.com/w3c/privacy.htm>

Annenberg Learner Privacy Policy:

http://www.learner.org/about/privacy_policy.html

YouTube Privacy Policy:

<https://www.google.com/intl/en/policies/privacy/>

MyCourses Technical Support: www.spcollege.edu/helpdesk

Pearson Technical Support: 855-875-1797

SIGNATURE PAGE: I have read, understand, and agree to abide fully by the parameters set in this syllabus and Syllabus Addendum.

Student Name (Please Print): _____

Student Signature: _____

Date: _____