Basic Course Information

Semester:	**Fall 2019**	Instructor Name:	**Rick Castrapel**
Course Title & #:	**Math 119 Elementary Statistics**	Email:	**Rick.castrapel@imperial.edu**
CRN #:	**11653**	Webpage (optional):	**spaces.imperial.edu/rick.castrapel**
Classroom:	**2722**	Office #:	**2766**
Class Dates:	**Aug 20 – Dec 12**	Office Hours:	**MW 4:00-5:00pm (online), TR 8:30-9:30am, or By Appointment**
Class Days:	**Tues/Thurs**	Office Phone #:	**760-355-6505**
Class Times:	1:45pm-3:50pm	Emergency Contact:	**Silvia Murray 760-355-6201 or Ofelia Duarte 760-355-6155**
Units:	4		

Course Description

Graphical representation of statistical data, calculations, and uses of various averages, measures of variability, introduction to probability, probability distributions, confidence intervals, sample size determination and hypothesis testing, ANOVA, linear regression and Chi-square analysis. Students will learn to use technology to find confidence intervals, test statistics, regression lines, and to produce graphics. This course also provides supervised practice in the appropriate use of technology designed to assist students in calculations required in beginning statistics. (CSU, UC)

Course Prerequisite(s) and/or Corequisite(s)

Corequisite of Math 019 CRN 11654 is strongly advised. This is a one-unit support course. In statistics, we concentrate on understanding statistical concepts. It is crucial that you do not get bogged down because you don't understand the math. Register for and attend the support course. Better to have it and not need it than to need it and not be able to get into it.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester. (ILO1, ILO2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Distinguish among different scales of measurement and their implications.
2. Interpret data displayed in tables and graphically.
3. Apply concepts of sample space and probability.
4. Calculate measures of central tendency and variation for a given data set.
5. Identify the standard methods of obtaining data and identify advantages and disadvantages of each.
6. Calculate the mean and variance of a discrete distribution.
7. Calculate probabilities using normal and t-distributions.
8. Distinguish the difference between sample and population distributions and analyze the role played by the Central Limit Theorem.
9. Construct and interpret confidence intervals.
10. Determine and interpret levels of statistical significance including p-values.
11. Interpret the output of a technology-based statistical analysis.
12. Identify the basic concept of hypothesis testing including Type I and II errors.
13. Formulate hypothesis tests involving samples from one and two populations.
14. Select the appropriate technique for testing a hypothesis and interpret the result.
15. Use linear regression and ANOVA analysis for estimation and inference, and interpret the associated statistics.
16. Make use of Chi-square distributions to analyze counts.
17. Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life science, health science, and education.

Textbooks & Other Resources or Links

Triola, Mario (2013). Elementary Statistics (Second California Edition). Pearson.ISBN10: 1-256-93644-8. ISBN 13: 1256989851

MyMathLab subscription

Course Requirements and Instructional Methods

1. Exams or Tests: There will be five tests and there will be no makeup exams given. The lowest score of the five tests will be disregarded. Please refer to calendar for dates.
2. Final Exam: The final will be given during the last day of classes. A score of 0 will be given if the final is missed. Please refer to calendar for dates.
3. Homework: The purpose of homework is to provide students with sufficient practice to master all topics and to do well on tests and the final exam. Homework is assigned and completed online through MyMathLab. See the last page of this syllabus for instructions. Homework deadlines are set to assure that you complete the homework before the test on covered material. **Do not ask for an extension to the MyMathLab homework deadline. There is no point in studying for a test after you have already taken it.**
4. There will be a team project. Details will be posted on Canvas.
5. There will be no extra credit. Students must learn the material to pass this course.
6. It is of the utmost importance that students review the material to do well on exams. Students are encouraged to form study groups to meet regularly to keep up with labs and homework and to study for tests.
7. **Calculator: A TI-83 plus or TI-84 plus is essential for your success in this course.** You may rent a TI-83 plus from the Math Lab for $10 for the semester. Go first to the cashier in Bldg 10, then take your receipt to the Math Lab to get your calculator. TI-83/84 simulators are available for smart phones.
8. You may use your cell phone as a calculator during tests, but your phone must remain flat on the table. Any attempt to photograph the test will result in termination of the test and a 0 for that test.

Course Grading Based on Course Objectives

The student's grade will depend on the following areas (not on total points):

Semester Tests:	**50%**	There will be 5 tests and there will be no makeup exams given. The lowest scoring test will be disregarded.
Project	**15%**	Team project on a hypothesis test.
Final Exam:	**20%**	The final will be given on the last day of the semester. A score of 0 will be given if the final is missed.
Homework	**15%**	Homework is done online via MyMathLab. See the attached information.
Extra Credit:	**0%**	There is no extra credit. Students must learn the material to pass this course.

All grades are calculated by using the standard scale of: A = 100---90% B = 89---80% C = 79---70% D = 69---60% F = 59% and below

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- Library Services. There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.
- **Mental Health Counseling Services**. Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information..

Veteran's Center

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

Extended Opportunity Program and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.

Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid

assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, lourdes.mercado@imperial.edu.

EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, alexis.ayala@imperial.edu.

Student Equity Program

- The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.
- The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

Anticipated Class Schedule/Calendar

*****Tentative, subject to change without prior notice*****

Math 119 Fall 2019 Tentative Schedule				
DOTW	**Date**	**Text**	**Event**	**Notes**
T	08/20/19	1-2,1-3		Introduction to Statistics
R	08/22/19	1-4, 2-2, 2-3		Summarizing and Graphing Data
T	08/27/19	2-4, 3-2		Statistics for Describing Data
R	08/29/19	3-3, 3-4		Statistics for Describing Data
T	09/03/19		**Test 1**	**Chapters 1, 2 and 3**
R	09/05/19	4-1, 4-2	**Craps**	Probability
T	09/10/19	4-3, 4-4		Addition Rule, Basic Multiplication Rule, Examples: Craps
R	09/12/19	4-5,4-6		Mult. Rule, Counting, Random Variables
T	09/17/19	5-1, 5-2		Binomial Distribution
R	09/19/19	5-3, 5-4	**Keno**	Binomial Distribution, Poisson Distribution
T	09/24/19		**Test 2**	**Chapters 4 and 5**
R	09/26/19	6-1, 6-2		Introduction to Normal Distribution
T	10/01/19	6-3, 6-4		Normal Distribution
R	10/03/19	6-5, 6-6		Normal Distribution
T	10/08/19	6-7		Normal as Approximation to Binomial
R	10/10/19	7-1, 7-2		Estimates of Proportion
T	10/15/19	7-3		Estimates of Mean
R	10/17/19	7-4		Estimates of Variance
T	10/22/19		**Test 3**	**Chapters 6 and 7**
R	10/24/19	8-1, 8-2		Basics of Hypothesis Testing
T	10/29/19	8-3		Hypothesis Testing of Proportion
R	10/31/19	8-4		Hypothesis Testing of Mean
T	11/05/19	8-5	**Project Assigned**	Hypothesis Testing of Variance
R	11/07/19		**Test 4**	**Chapter 8**
T	11/12/19	9-1, 9-2		Inferences about two proportions
R	11/14/19	9-3, 9-4		Inferences about two means, indep. and dep.
T	11/19/19	10-1, 10-2		Linear Correlation
R	11/21/19	10-3		Linear Regression
T	11/26/19		**Holiday**	**Thanksgiving Week**
R	11/28/19			
T	12/03/19	11-3, 12-2		Contingency Tables, One-Way ANOVA
R	12/05/19		**Test 5**	**Chapters 9, 10, 11-3, 12-2**
T	12/10/19			**Project Reports** **Final Review**
R	12/12/19		**Final Exam**	**Comprehensive Final Exam**

Pearson | MyLab | Statistics

Student Registration Instructions

To register for Math 119 Fall 2019 11653/11654 TR 1:45pm-3:50pm:

1. Go to www.pearson.com/mylab.
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: castrapel05705, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.

   You have an account if you have ever used a MyLab or Mastering product.

   - » If you don't have an account, select **Create** and complete the required fields.
6. Select an access option.

   - » Enter the access code that came with your textbook or that you purchased separately from the bookstore.
   - » If available for your course,
     - Buy access using a credit card or PayPal.
     - Get temporary access.

   If you're taking another semester of a course, you skip this step.
7. From the You're Done! page, select **Go To My Courses**.
8. On the My Courses page, select the course name **Math 119 Fall 2019 11653/11654 TR 1:45pm-3:50pm** to start your work.

To sign in later:

1. Go to www.pearson.com/mylab.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select the course name **Math 119 Fall 2019 11653/11654 TR 1:45pm-3:50pm** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearson.com/mylab.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select **Upgrade access** for **Math 119 Fall 2019 11653/11654 TR 1:45pm-3:50pm**.
5. Enter an access code or buy access with a credit card or PayPal.