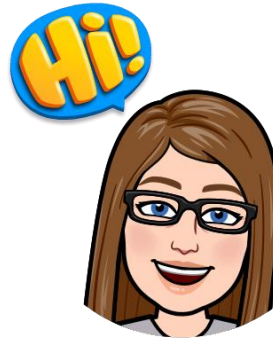


# MATH M15 – Fall 2022

## INTRODUCTORY STATISTICS

### CRN 71302



**Instructor:** Laurel Drane

**Zoom:** [Zoom ID 479-579-1805](#)

**Campus Office:** AC – 225

**Campus Phone:** (805) 553-4698

**E-mail:** [ldrane@vccd.edu](mailto:ldrane@vccd.edu)

**Format:** In-Person

**Course Instruction:** Mondays and Wednesdays  
7:00PM – 8:50PM in TB-120

**Final Exam:** Monday 12/12 7:15PM – 9:15PM

#### **Office Hours:**

Tue. 1:00PM – 2:30PM AC-225

Wed. 11:00AM – 12:00PM Zoom

Thu. 1:00PM – 3:00PM AC-225

and by Appointment via Zoom

#### *Online Student Support Desk:*

Moorpark College has technical support for any class that is online, hybrid or using Canvas:

- Having trouble submitting an assignment in Canvas or connecting to your class via Zoom? [The Moorpark College Online Student Support Desk](#) is your destination for navigating the complexities of the online learning environment.

**Contact:** To get started, select one of the options below:

- [Schedule Appointment](#)
- [Join Virtual Lobby](#)
- Call (805) 553-4188
- For Canvas specific support after hours, the student may call the 24/7 Canvas Help Line: (844) 602-6290

#### *Healthy Return to Campus:*

When you come to campus, it is recommended to check in using the daily screening form in your MyVCCCD app. As of the first day of the semester, vaccinations are no longer required to enter campus, and masks are highly recommended but not mandatory. For a complete list of all safety documents, district guidelines, and district communications about COVID-19, please see the [district website on COVID-19 Updates](#)

#### *Administrators:*

**[Department Chair:](#)** Phil Abramoff (805) 553-4878 AC – 231

**[Division Dean:](#)** Matt Calfin (805) 378-1448 AC – 233

**[Division Office:](#)** Melanie Weerasinghe (805) 378-1448 AC – 232

Hours: Monday through Thursday 8:00AM – 5:00PM; Friday 8:00AM – 12:00PM

### *Course Description:*

Explores the nature of statistical methods, including description of sample data, probability, theoretical frequency distributions, sampling, estimation, testing hypotheses and special topics. Provides problem solving techniques.

### *Student Learning Outcomes:*

Students successfully completing Math M15 will be able to perform each of the following (this can be done by hand, with a graphing calculator, or with statistical software):

1. Construct a single-sample confidence interval and draw an appropriate conclusion.
2. Construct a single-sample hypothesis test based on a given claim and draw an appropriate conclusion.

### *Course Objectives:*

- Summarize data graphically by displaying data using methods from descriptive statistics, interpreting data in tables graphically by using histograms, frequency distributions, box-and whisker (five-number summary); find measures of central tendency for data sets: mean, median, and mode; find measures of variation for data sets: standard deviation, variance, and range; relative positions of data and distinguish among scales of measurements and their implications; distinguish between populations and samples; and identify the standard method of obtaining data and the advantages and disadvantages of each.
- Find simple probabilities and probabilities of compound events and compute probabilities using the complement, discrete probability distributions, apply concepts of sample space, the binomial probability distribution.
- Standardize a normally distributed random variable, use normal distribution tables to find probabilities for normally distributed random variables and the t-distribution, and use the Central Limit Theorem to find probabilities for sampling distributions.
- Construct and interpret confidence intervals for proportions and means.
- Identify the basics of hypothesis testing and perform hypothesis testing for means, proportions and standard deviations from one population, and difference of means and proportions from two populations, including finding and interpreting p-value and examining Type I and Type II error.
- Find linear least-squares regression equations for appropriate data sets, graph least-square regression equations on the scatter plot for the data sets, and find and apply the coefficient of correlation.
- Use the chi-square distribution to test independence and to test goodness of fit.
- Conduct a one-way Analysis of Variance (ANOVA) hypothesis test.
- Select an appropriate hypothesis test and interpret the result using p-value; use appropriate statistical technique to analyze and interpret applications based on data related to business, social sciences, psychology, life sciences, health sciences or education, and interpret results using technology-based statistical analysis.

### *Attendance:*

The [Moorpark College attendance policy](#) states that when a student's absence exceeds in number  $\frac{1}{9}$  of the total class contact hours for the session, the instructor may drop such student from the class. If you miss four consecutive classes, you may be dropped. If you choose

to drop the class, it is your responsibility to drop from the class. Please let me know if there is something preventing you from participating!

### *Important Dates:*

Last day to add class:	26 – AUG – 2022
Last day to drop with a refund:	26 – AUG – 2022
Last day to drop without a W:	05 – SEP – 2022
Last day to drop with a W:	18 – NOV – 2022
Census Date:	06 – SEP – 2022

### *Textbook and Materials:*

We are using Canvas as our textbook this semester, supplemented with the statistical analysis software StatCrunch. You can purchase StatCrunch access through the bookstore but I recommend buying directly online when you sign up. Scientific calculators are recommended for basic calculations; StatCrunch should be used for statistical analyses.

### *Math Center:*

The Math Center offers free tutoring!

On-Ground Hours: Monday, Tuesday and Wednesday 10:00AM - 4:00PM

Online Hours: Monday to Thursday 2:00PM - 7:00PM; Friday and Saturday 11:00AM - 4:00PM

Additional information can be found on the [MC Tutoring Center Page](#).

### *Grading Scale:*

The course grade is weighted based on groupwork, homework, exams and the final as follows.

Mid-Module Checkpoints	15%	Grading Scale:	A: 90% and above
Discussions	20%		B: 80% - 89%
Quizzes	15%		C: 70% - 79%
Exams	30%		D: 60% - 69%
Final Exam	20%		F: Below 60%
<b>Total</b>	<b>100%</b>		

*End-of-semester grades are computed using normal rounding rules.*

### *Mid-Module Checkpoints (15%)*

As we move through the topics in class, we will complete short Canvas "quizzes" to make sure everyone is on the same page, either together as a class, in teams, or individually at home. If you miss a class session you may complete any of the mid-module question quizzes at home for full credit by the due date. These quizzes also have 3 attempts each - if you do not earn full credit the first time through, please refresh the information and try again!

### *Discussions (20%):*

Most modules will have a "learn by doing" discussion where it is your turn to apply the concepts and literally learn - by doing! These assignments are group Canvas discussions and may be discussed in class before the due date but should be completed at home. Each

discussion will have an initial post followed by corrections (if applicable) and peer responses. Please check the rubrics along with the general information for details and tips on giving high quality feedback.

### *Module/Unit Checkpoint Quizzes (20%):*

Module checkpoint quizzes occur at the end of most modules. They check your understanding of the topics presented in each module. Unit checkpoint quizzes occur at the end of each unit. They are longer quizzes designed to assess your understanding of each unit in the course. These quizzes have 2 attempts each – if you do not earn full credit the first time through, please refresh the information and try again!

### *Exams (15% each):*

There are two exams, each worth 15% of your grade (30% total).

### *Final Exam (20%):*

The final exam is cumulative, covering all topics from the course. It is scheduled for Monday 12/12 from 7:15PM - 9:15PM.

### *Late Work:*

In this class everyone gets three “free passes” to delay a set of classwork or a homework assignments one week with no penalty. Please contact me for any surprise situations! Life happens and I am a reasonable person. Partial credit may be awarded for late discussion answers at any time.

### *Calendar and Pace:*

It is very important that you make a schedule for yourself to stay on track. There are a lot of topics to cover in this 4-unit course and it is easy to procrastinate. In general, you should spend 4 hours each week in class (for lecture material) and 8-12 hours outside of class studying and working on homework discussions.

### *Contact:*

I generally check my email several times a day during the week and once on Sunday evening. Please plan ahead – if you email me at 11:30PM on the night an assignment is due, it is very unlikely that you will get a timely response. I will respond to all direct messages within 48 hours.

### *Sexual Misconduct/Title IX*

Incidents of sexual misconduct can involve students and employees and include: sexual harassment, gender/sexual orientation-based slurs, electronic harassment related to sex/gender/sexual orientation/gender identity, sexual assault of any type, stalking (including digital stalking), dating/domestic violence, gender/sex-based hate crimes, etc. If you or another student has experienced any of these types of events, regardless of where they occurred or who the perpetrator may have been, please immediately contact your instructor, Dean, or the Title IX Coordinator: [Priscilla Mora](#). It is the responsibility of the College to investigate the

matter and provide support and appropriate assistance to the student who may have been affected. Questions? Visit the [TIX/Sexual Misconduct page](#).

### *ACCESS:*

In compliance with the Americans with Disabilities Act, any student who has a classifiable physical, learning, or psychological disability, is allowed appropriate accommodations in the classroom, or for testing and evaluation purposes. However, in order for the instructor to provide these accommodations, the student must be formally registered with ACCESS. Furthermore, since it is ACCESS policy that such students allow the instructor up to two weeks for the process to be completed, students should present their confidential forms to the instructor as early in the semester as possible. Students may contact the ACCESS department at (805) 378-1461 or contact Silva Arzunyan via [email](#). More information can be found on the [Moorpark College ACCESS page](#).

### *Academic Honesty:*

The integrity of an academic community means that citations of ideas, methodologies, and research findings are full and correct. In addition, each student can promote academic honesty by protecting her/his work from inappropriate use by others and by maintaining high standards of academic honesty. The main violations of academic honesty are cheating and plagiarism. Cheating includes the unauthorized use of certain materials, information, or devices in writing examinations or in preparing papers or assignments. Any student who aids another student in cheating is also guilty of this academic dishonesty.

Other possible forms of cheating include submitting the same work in more than one class without permission and working on exams with the assistance of others.

Plagiarism is the presentation of ideas, words, and opinions of someone else as one's own work. In addition to directly quoted published work, paraphrased material must also be attributed to its original writer.

Moorpark College takes academic honesty very seriously. For more information on the college policy, visit the [MC Academic Honesty page](#).

### *Email Etiquette:*

Be sure to check Canvas regularly for any additional communication regarding the course. Following College and District procedure to align with privacy laws, you must e-mail me from your "@my.vccd.edu" e-mail account and should include your name and the course name or send a message through Canvas. No grades will be discussed through email; course progress will be discussed in office hours. In addition to using correct grammar and spelling, please be professional and courteous in your communication; this is good training for your current or future career.

### *Campus Smoking Policy:*

Please note that smoking on the Moorpark College is now prohibited in all locations on campus, including all buildings, parking lots and all general campus areas. This includes all forms of cigarettes and tobacco, e-cigarettes and other nicotine delivery systems, and any other types of smoking of any form. Violations will be dealt with according to the [Student Code of Conduct](#).

### *Math Division Grade Policy:*

Each course officially ends at the conclusion of the Final Exam. Final letter grades are then posted by the course instructor for official transcript purposes. Grades are calculated according to the grading structure as determined by the instructor's course syllabus. Instructor decision on final course grades are non-negotiable, binding, and final. There are no assignments or bonus points available after the course is officially over. Inquiries will be directed to this paragraph of the syllabus.

### *Campus Emergencies:*

Contact campus police at (805) 378-1455 or dial 911 in the event of an emergency.

### *Health Center:*

Students who have any physical, psychological, or emotional concerns, may contact the Student Health Center at (805) 378-1413. Visit the [Health Center Page](#) for more information.

### *Counseling Services:*

The Counseling Center is in Fountain Hall, Room 120, although counseling services are not currently conducting business in person. Appointments can be made online through the [Counseling Services Page](#) or by calling (805) 378-1428.

**The information provided in this syllabus is subject to change.**