

# Math 140 Syllabus – Introductory Statistics

This syllabus is subject to change at the discretion of the instructor.

*College of the Canyons, Fall 2017 Main Syllabus*

*Section #29242 Day/Time: M,W 11:00am-1:25pm (HSLH-134: This is a computer room.)*



## Course Description

This course examines statistical methods including empirical and theoretical frequency distributions, sampling, estimation, hypothesis testing, correlation, regression, probability, counting techniques and computer-based statistical software.

## Student Learning Outcome

Upon completion of this course, students will be able to apply basic statistical procedures, including the collection, analysis, and reporting of data designed to test a research hypothesis, as well as to demonstrate the appropriate use of computer-based statistical software.

## Professor Contact Information

Instructor: Dustin Silva

Email: [dustin.silva@canyons.edu](mailto:dustin.silva@canyons.edu)

Office: TBD

Office Hours:

Day	Time	Location
Monday	1:26pm-2:06pm	HSLH-134 (This may change.)
	6:15pm-7:15pm	CCC-TLC (This may change.)
Tuesday	1:26pm-2:06pm	HSLH-134 (This may change.)
Wednesday	1:26pm-2:06pm	HSLH-134 (This may change.)

You do not need an appointment to attend office hours. These are times that I have reserved to be available to help and answer your questions. Other times are available. Please ask.

## Time Commitment

This is a 4-unit course. This may sound like a lot of hours to you, but the workload outside of class will be approximately 10-15 hours per week which is 2-3 hours outside of class for every hour spent in class.

As a general guideline, you want to set aside 2 hours each day to read through the online book, attempt the exercises and take the quizzes online, review your in-class activity sheets, complete homework, correct problems on returned exams, and seek help through your instructor, the TLC, and study groups.

## Student Information

**Email.** It's important that we maintain good communication. Become familiar with your COC email. Your COC email may be forwarded to your personal email account. Please see the following website for how to do this.

<http://www.canyons.edu/offices/admissions/Pages/studentemail.aspx>

**Student ID Card.** Student ID cards may be obtained in Quad 1C (Admissions and Records) at Canyon Country or in STCN-102 at Valencia. Your student ID card will be required to receive tutoring support, use a campus computer, or complete a workshop/guided learning activity (GLA.)

**Academic Needs.** Students with disabilities who experience barriers in this course are encouraged to contact me. The DSP&S office is available to facilitate the removal of barriers and ensure reasonable accommodations. Please contact me privately if you need accommodations based on the impact of a disability.

## What you will need:

Computer access outside of class  
Scientific Calculator  
Stapler  
Sheets of copy paper and lined paper  
3-ring binder with 5 or more dividers  
Pencils and eraser  
Post-it notes (optional)



### Calculator:

A scientific calculator is needed for this class. A basic calculator will work for the first part of the course though. You will not be allowed to use graphing calculators or cell phones on the exams, so I want you to develop the habit of bringing your scientific

calculator to class on a daily basis. The scientific calculator that I recommend is the **TI-30X IIS** (\$10 to \$15).

### Computer Access:

Access to Canvas:

<https://coc.instructure.com/login/canvas>

**USERNAME:** Your MyCanyons username (for example, jdsmith)

**PASSWORD:** students

Please remember to change your password.



The library, TLC, and ASG rooms provide access to computers and limited printing.

## Attendance

Please arrive to class on time. If you are late, you may miss announcements, quizzes, points for homework that may need to be turned in at the beginning of class, explanations based upon student questions, instructions for group-work, or classwork points.

If you need to leave early you may lose classwork activity points as well.

If you miss more than 3 classes, then you may be dropped from the course. Arriving late or leaving early may be counted as a tardy, and 2 tardies will be counted as an absence. Being an hour or more late to class, or leaving an hour or more early from class may be counted as an absence. Please contact me if you are concerned about being dropped. The drop deadlines are listed below.

On the other hand if it is your intention to drop the course and it is close to the deadline, you should process the drop rather than hoping that I will do it.

## Deadline Dates (for semester long classes)

Refund:	9/03/2017
Add:	9/03/2017
1 <sup>st</sup> Drop – without a W:	9/03/2017
2 <sup>nd</sup> Drop – with a <b>W</b> :	11/12/2017

If you drop the class after 9/03 you will receive a **W**. After 11/12 you will not be able to drop the course. A grade of **W** or **FW** will count as one attempt at the course, and you are allowed three attempts at Math 140 at COC.

**Email Policy:** You must email me from your canyons email for any reason. I may not respond to emails from a non-canyons email system, especially if the email relates to grade discussion. Your email should be properly written and in complete sentences. I will not respond to informal or text-like emails.



We will be using a Statistics software program called "StatCrunch". StatCrunch can be used on both MAC and PC computers and does not need to be saved on the computer. You will need to purchase StatCrunch. The program costs \$13.75. To register for StatCrunch, go to [www.statcrunch.com](http://www.statcrunch.com). Click on the "Subscribe/Get Access" button on the right side of the screen. Click on "Purchase 6 month access for \$13.75" under the students section. Click on "I Accept" on the privacy screen. If you already have a Pearson account, you can enter the account number and password. If you do not have a Pearson account, click "no" and use any email address as your account number and pick a password. Write down the password as you will need it to enter StatCrunch. Click the "next" button. Fill out the billing information and purchase "StatCrunch". It is good to write down your order and transaction numbers so that you can refer to it if problems arise. Now that you have purchased StatCrunch, if you need to analyze a data set during class, simply go to [www.statcrunch.com](http://www.statcrunch.com), type in your account and password and you are ready to analyze data!!

# Assessment

## Overall Grade

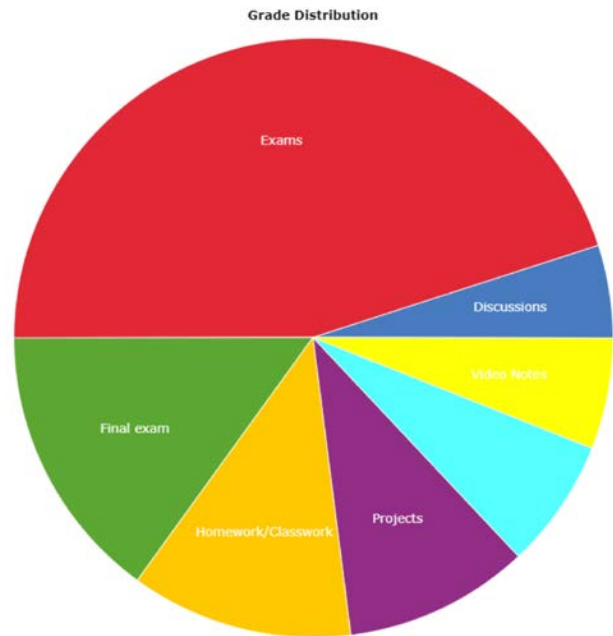
The overall grade will be using the following scale:

A: 90-100%      B: 80-89.99%      C: 70-79.99%  
D: 60-69.99%      F: 0-59.99%

## Weighted Grades

Remember that with weighted grades, points are not all equal! Five points of a HW/CW are not the same as five points on an Exam! Here are how they are weighted. The overall grade will be weighted from the following.

Homework/Classwork	12%
Video Notes	6%
Discussions	5%
Quizzes (Canvas and In Class)	7%
Projects	10%
Exams	45%
Final exam	15%



### Categories

- Discussions, 5, 5%
- Exams, 45, 45%
- Final exam, 15, 15%
- Homework/Classwork, 12, 12%
- Projects, 10, 10%
- Quizzes (Canvas and In Class), 7, 7%
- Video Notes, 6, 6%

## Homework/Classwork

Homework will be assigned in various formats. This may include working in Canvas, labs, watching and filling in video notes, worksheets, finishing classwork from class, or anything else your instructor may assign to you. If you miss a class, you may be able to makeup part of what you missed, such as a handed out homework assignment. Online assignments and classwork may not be able to be made up, so it's important for you to attend class and stay on top of your online assignments.

**Other.** There may be other homework, classwork, or quizzes assigned.

## Flipped Classroom Information:

Flipped Classroom Model: by

MADDDrawProductions

<http://www.youtube.com/watch?v=ojiebVw8O0g>

## Video Lecture Notes

Part of your homework will to daily watch the video lectures located on Canvas (but hosted through YouTube). You must have access to a computer. Please remember that computers are available on campus! It is essential that you come to class prepared. You will be hopelessly lost if you fail to watch the video lectures or print the notes. If you do not complete the online homework assignments, your grade will suffer. I will be checking your video lecture notes every class session. You may receive half credit for late video notes up to the corresponding exam.

## Discussion Board

On Canvas, you will be asked to respond to a series of questions based upon an article, TED talk, or exam reflection. These assignments include material related to statistics or are part of the affective domain of learning which addresses a student's emotions and feelings. You will be responding to the information given and then you will be responding to each other.

What does this mean? We ask our students to "think about thinking" in a manner they probably have not experienced in a math class. For example, having students honestly deal with their fears, particularly around failure, allows them to both succeed in the classroom and also recognize they are in a community of like-minded individuals. Increasing their awareness directly impacts their quality of learning.

## Quizzes

Quizzes will be given on a regular basis. Quizzes may be given in a variety of formats. These include on Canvas, in class, or other formats. Quizzes will not be able to be made up for ANY reason. Arriving late or leaving early may result in a zero on a quiz, in addition to a tardy.

## Projects

**We will have at least one project this semester. This will be discussed later in the semester.**

## Exams

There will be at least 3 exams, as well as a comprehensive final exam. You may use a scientific calculator or a basic calculator on the exams. Some exams may require you to use StatCrunch. You may **NOT** access or use your cell phone or a graphing calculator on the exams.

Feel free to bring regular ear plugs with you on exam days if external noise may distract you or if the extra quiet helps you to concentrate. Leave other electronic listening devices in your backpack.

### **Makeup Exam Policy:**

There are no make-up exams, and missed exams will be scored as a zero. However, your lowest exam may be replaced by the final if it will improve your overall grade. This replacement will apply to only one exam. Sometimes an unforeseen circumstance such as car trouble, car accident, or illness will prevent you from taking an exam. This is when it is best to let the final replace a missed test.

If you know in advance that you will be absent on an exam day, please contact me at least a week in advance to schedule a time to take it beforehand.

Here are the testing procedures for the TLC:

1. Arrive on time. Tests will not be administered 1 hour prior to closing unless you sign a release form.
2. You must present some type of photo ID to be given the exam.
3. All personal items including cell phones will be housed at the information desk.
4. Scratch paper will be checked and stamped by a TLC employee.
5. You may not leave the testing room for any reason after receiving the test.

It is good practice to look over your exams as soon as they are returned to you in class. If there is a discrepancy, please bring it to my attention as soon as possible.

## Final Exam

The final exam will be cumulative, and will cover the entire semester. Please begin reviewing for the final at least two weekends before the final exam to give yourself time to review your exams and then practice the final review guide.

If the final exam score is better than your lowest unit exam, the final will replace your lowest exam as well as counting as the final exam. For students whose final exam score is lower than their lowest unit exam, the final will not replace the lowest exam score but it will still count as the final exam. See the grading scale for how much this is worth.

## Cell Phones during Exams

During exams, cell phones must be muted or turned off, put in your bags, and bags left at the front of the room. If you don't have a bag, you will leave your cell phone on the instructor's desk. Having a cell phone visible during an exam will be viewed as cheating.

## Academic Integrity (Cheating)

During exams, keep your eyes on your own papers, mute and place your cell phones in your backpacks, and keep both hands on the table. Glancing at a neighbor, neighbor's paper, or cell phone during an exam will be viewed as cheating. This may result in a zero on the exam or dismissal from the course in addition to further academic discipline determined by the Dean of Students. Remember, no graphing calculators are allowed on the exams. Please use the restroom before we begin an exam because you may not leave and return to the exam once you have begun the exam. It is best not to sit next to someone that is part of your study group. Any incident involving suspected cheating will be reported to the Dean of Students.

## Class Environment

### In-class Discovery Based Activities



In most math courses, you listen to a lecture and then go home and try to do problems that are similar to what the teacher taught in lecture. Math 140 is

a little different. The emphasis of the course is not to do problems by yourself for homework. Instead, you will be expected to work with your fellow students to solve problems during class. Also the activities are meant to challenge you and teach you the topics at a higher level. In other words, the in-class activities are an important part of the class.



### Productive Persistence

Studies show that students who are allowed to struggle and work through problems do much better in the long run than those who

are given the answers right away. With this in mind, you will be expected to work hard and figure out material during activities. You will eventually get the answers, but I will not always give you answers to questions right away. I know this is hard on you, but we have seen huge gains in problem solving and critical thinking skills when we allow you to struggle some. Think of it this way. In the workplace, your employer is going to ask you to be able to work through situations and figure things out on your own.

## Reading, Writing, and Presenting

The study of statistics is really the study of



information. An employer's number one request is that their employees can look over information, critically think to help find a solution,

and then be able to present their solutions in written reports and verbal form. With that being said, Math 140 will incorporate a lot of reading, writing assignments, and verbal presentations to your classmates.



### Critical Thinking and Growth Mindset

One of the main goals of math 140 will be to develop critical thinking skills. Remember intelligence, critical

thinking, and mathematical/statistical proficiency are not fixed quantities. Even if you don't think of yourself as a math person, you are not stuck in this mindset. Our brains can grow and change. Any student can become a critical thinker. It just takes effort and the belief that we can change. Therefore there will be "exploring" exercises in almost every class that will help us develop critical thinking skills and help us understand algebra and statistics at a much higher level.





## Strategies for Success

### **Come to class (and be on time)!**

This is obvious, but it is probably the single most important strategy for successfully completing Math 140. When you are in class, you have the opportunity to work with other students and to get feedback and help from me. We will also devote class time to working on activities and online exercises that are worth points. So attending class is an efficient and productive way to get course work done.

### **Get help when you need it!**

It sounds simple but can be hard to do, especially if you are feeling frustrated or confused. If at some point in the course, you feel like giving up or you begin to avoid doing the work because it is hard for you (or at worst you are tempted to cheat), **ask for help as soon as possible.**

***Thoughts on asking questions:** I have heard students say that they don't ask questions because they fear that they will look stupid. In my view nothing could be further from the truth. To me, it takes a lot of critical thinking to formulate a question. I also view asking for help as an act of intellectual courage. I appreciate it when students ask questions and respect those that do. So please ask questions!*

**Getting help from classmates:** We will work in groups a lot this semester. Working with others has advantages. It can keep you motivated. In addition, talking can build deeper understanding and help ideas stick. But there is a difference between working with someone else and letting somebody else do your work for you. The former is collaboration; the latter is cheating... and cheating you of your education. When you work with others, what you eventually produce should be yours. Your work should reflect your understanding and be written in your own words. Always make sure that your collaboration with others is promoting your learning, not undermining it.

## COC's smoking policy

In the interest of promoting health and well-being of district students, staff and visitors and maintaining the safety of district facilities, it shall be the policy of the district to limit or prohibit smoking/tobacco usage in and on campus facilities.

### **Study Tips**

After each class, hole punch your papers and file them in your binder.

While working on the computer, have paper to work out the problems. Experiment with times ranging between 1 and 2 hours to chunk your study time. At home, try to work in a quiet environment. You may want to try working in the TLC or Library.

## Math Course Sequence

You may view the math placement chart at <http://www.canyons.edu/Offices/Assessment/Documents/FALL.2015.MATH.and.ENG.PLACEMENT.CHART.pdf>



## Associate Degree Information:

Recent California Legislation guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer”. The Associate in Science for Transfer (AS-T) in **Math, Physics, Computer Science, and Geology**, or the Associate in Arts for Transfer (AA-T) in **Geography**, is intended for College of the Canyons students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students must earn a C or better in all courses required for the major or area of emphasis. The College also offers associate degrees in **Biology, Computer Science, Engineering, and Math**. For more information on the suggested sequence of classes to be taken in order to obtain these degrees in two years, as well as information on when these courses are guaranteed to be offered, please visit:

<http://www.canyons.edu/Offices/MathScienceDiv/Pages/Classes.aspx>

## Educational Plan Online:

A good educational plan is critical to college and career success. All current students should complete their comprehensive educational plan for College of the Canyons by visiting your My Canyons account. Students can also receive help in creating their education plan by visiting <http://www.canyons.edu/MAP> website for details and workshops.



## MANAGEMENT OF STRESS AND MENTAL HEALTH:

Often the pressure on our students is very strong, involving academic commitments, relationships, outside jobs and family pressure to name a few. The staff and faculty of College of the Canyons are here to see you succeed academically and care about your emotional and physical health. You can learn more about the broad range of confidential student services, including counseling and mental health services available on campus by visiting the Student Health & Wellness Center in the Student Services Building (across from the bookstore) or by clicking on <http://www.canyons.edu/offices/Health/Pages/default.aspx> . The phone number is **661-362-3259**.

Also, the **National Suicide Hotline number is 1-800-273-8255**. All students at COC are encouraged to enter that phone number in their cells. You can call when you, or someone you know, is having thoughts of suicide or is in severe distress.