HONORS COMMITTEE Agenda	Monday, August 27, 2018 L-201 2:00PM

Type of Meeting: Regular
Note Taker:
Please Review/Bring: Agenda Packet

Committee Members:
Tamira Palmetto Despain, Faculty Co-Chair
Vejea Jennings, Faculty Co-Chair
Dr. Irit Gat, Division Dean
Rae Agahari, Arts & Humanities
David L. Adams, Career Tech Education
Susan Knapp, Counseling
VACANT – Health and Safety Sciences
Angela Koritsoglou, Rhetoric & Literacy
Kimberly Thomas, Library Representative
Dr. Mark McGovern, Math Sciences Engineering
Pavinee Villapando, Math Sciences Engineering
Dang Huynth, Math Sciences Engineering
Dr. Matthew Jaffe – Social and Behavioral Sciences
John Vento, Ex-Officio
TAP Representative
Alpha Iota/ASO Representative

Items	Person	Action
I. Call to Order and Roll Call		
II. Opening Comments from the Chair	T Palmetto Despain V Jennings	
III. Open Comments from the Public		
IV. Approval of Minutes	ALL	
V. Old Business		
VI. Discussion Items	T Palmetto Despain	a. Math 115 Honors Jane Bowers (attachments) b. Honors Scholar Designation – Susan Knapp c. How to Get AVC Students Involved with Honors Earlier – Susan Knapp
VII. Action Items		a. Math 115 Honors Jane Bowers
VIII. Other Business		
IX. Adjournment		

ANTELOPE VALLEY COLLEGE
HONORS COMMITTEE MEETING
August 27, 2018
2:00 p.m. – 3:00 p.m. Room L201

To conform to the open meeting act, the public may attend open sessions

1. CALL TO ORDER AND ROLL CALL

   Members present:
   - Tamira Palmetto Despain, Faculty Co-Chair
   - Vejea Jennings, Faculty Co-Chair
   - Dr. Irit Gat, Division Dean
   - Rae Agahari, Arts & Humanities
   - David L. Adams, Career Tech Education
   - Susan Knapp, Counseling
   - Angela Koritsoglou, Rhetoric & Literacy
   - Kimberly Thomas, Library Representative
   - Pavinee Villapando, Math Sciences Engineering
   - Dang Huynth, Math Sciences Engineering
   - Dr. Matthew Jaffe – Social and Behavioral Sciences
   - John Vento, Ex-Officio

   Members absent:
   - Dr. Mark McGovern, Math Sciences Engineering

   Guests:
   - Jane Bowers

2. OPENING COMMENTS FROM THE HONORS COMMITTEE CHAIR
   a. Palmetto Despain and Jennings facilitated introductions.

3. OPEN COMMENTS FROM THE PUBLIC
   b. none

4. APPROVAL OF MINUTES

6. OLD BUSINESS
   a. none

7. DISCUSSION ITEM
   a. Math 115 Honors Jane Bowers (attachments)
      i. The Committee read and discussed Jane Bowers' Math 115 Honors course.
   b. Honors Scholar Designation
      i. The committee discussed how to deal with a student hoping to earn an Honors designation on their transcript even though he/she is one class short of the requirement and has already graduated. The committee

discussed encouraging the student to move on with their transfer and not delay transfer just to complete one more Honors course.

    c. How to Get AVC Students Involved with Honors Earlier

        i. The committee discussed how to continue to grow the Honors program and encourage students to seek out the Honors program. Faculty support is needed to grow the program.

8.   ACTION ITEM

    a. Motion to approve Jane Bowers' Math 115 Honors course

        i. Motion to approve

        ii. Motion was seconded.

            1. Open for Discussion – no discussion.

            2. Motion passed unanimously.

            3. Motion adopted.

8.   OTHER

9.   ADJOURNMENT (3:00p.m.)

NON-DISCRIMINATION POLICY

Antelope Valley College prohibits discrimination and harassment based on sex, gender, race, color, religion, national origin or ancestry, age, disability, marital status, sexual orientation, cancer-related medical condition, or genetic predisposition. Upon request, we will consider reasonable accommodation to permit individuals with protected disabilities to (1) complete the employment or admission process, (b) perform essential job functions, (c) enjoy benefits and privileges of similarly-situated individuals without disabilities, and (d) participate in instruction, programs, services, activities, or events.

FALL 2018
Math 115: *STATISTICS* (HONORS)

COURSE INFO	**CRN** 71749 **Units** 4
TIME/LOCATION	**Mon / Wed / Fri 11:00a–12:10p APL 114**
INSTRUCTOR	*Snizhana Jane Bowers* e-mail: sbowers@avc.edu phone: (661) 722-6300 ext. 6947
OFFICE HOURS	Office **UH 150** MON → 1:00–2:30p WED → 1:00–2:00p (and by appointment) TUE → 1:00–2:30p THUR → 1:00–2:00p

PREREQUISITES	Completion of Intermediate Algebra (Math 102) or CPT eligibility for any college-level math course is an absolute requirement. Please note that good algebraic skills and eligibility for college-level reading are necessary to be successful in this course.
COURSE DESCRIPTION	Statistics is a 4-unit introductory course in statistical procedure that includes the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. (CSU, UC, AVC)
STUDENT LEARNING OUTCOME (SLO)	1. Organize, draw, interpret, calculate summary measures for univariate & bivariate data sets. 2. Solve probability problems involving the concepts of independent events, mutually exclusive events, conditional probability, binomial distribution, and normal distribution. 3. Determine and interpret confidence interval estimates of population means and population proportions. 4. Perform hypothesis tests: one-population proportion, one-population mean, chi-square goodness-of-fit and chi-square independence.
ATTENDANCE, TARDINESS AND ABSENCES	• IF you are to be successful in this class, it is important to attend **all** classes. • Missing more than 3 classes without a VERY serious reason may result in a drop for non-attendance. Please be aware that an absence for whatever reason is still an absence. • If a student is absent for *2 consecutive classes* without notifying the instructor, the instructor reserves a right to drop a student without further notice. • Excessive tardiness (3) will count as 1 absence. • Notify your instructor by email of any absence ahead of time or right away when you miss a class. Provide a reason for your absence. • **DO NOT schedule any counselor, doctor's, dental, financial aid, etc. appointments, and job interviews during class sessions. Remember, absence for whatever reason is still an absence.** • *YOU are responsible for all announcements made in class regardless of your absence!*
CLASSROOM AND CELL PHONE POLICIES	• It is instructor's responsibility to maintain a comfortable classroom environment that is conducive to learning; therefore, if your behavior is disturbing for the learning process taking place in the classroom, you will be asked to leave the classroom, and receive a tardy point; you also might face the consequences described in the AVC Student Code of Conduct at https://www.avc.edu/information/policies/studentcode. • Disruptive behavior includes: prolonged chattering, making offensive remarks, using cell phone, eating or drinking in class, as well as academic violations such as cheating on the exam by looking at other student work, or coping someone's HW assignment. • **Be respectful to your classmates, your instructor, and yourself.** • **CELL PHONE USE IS PROHIBITED FOR ANY REASON IN THE CLASSROOM. If you must to make or answer a call/text, step outside. You will be asked to leave the classroom if you keep using your cell phone for any reason during the lesson.**

REQUIRED MATERIAL	• **MyMathLab access @ www.mymathlab.com** (REQUIRED) • **Course ID – bowers07653** (comes with ebook), *printed book is OPTIONAL* • **Graphing calculator TI-84 or TI-83** If you would like to purchase a printed book – it is "*Elementary Statistics CA edition,* 3rd edition**,** by Mario F. Triola ISBN 9781323750148 or standalone access code ISBN 9781323617144

HELP WITH MYSTATLAB	***How to Get Started with MyMathLab (MyStatLab):***
	1. Sign in to **Canvas** and enter your Canvas course.
	2. Do one of the following:
	   > Select any **Pearson** link from any module
	   > Select a **MyLab and Mastering** link in the Course Navigation
	3. Select **Open MyLab and Mastering** or a content link.
	4. Get access to your course Pearson content:
	   > If you have a Pearson account (you have an account if you have ever used a Pearson MyLab product): Enter your Pearson account **username** and **password** to Link Accounts.
	   > If you don't have Pearson account: select **Create** and follow the instructions.
	5. Select an access option.
	   > Enter the access code that came with your textbook or was purchased separately from the bookstore.
	   > Buy access using a credit card or PayPal account (Access code is also available at the Marauder bookstore)
	   > If available, get temporary (14 day) access by selecting the link near the bottom of the page.
	7. From the *You're Done!* page, select **Go To My Courses**.
	   Note: It is recommended that you always enter your MyLab Math course through Canvas. Get your computer ready For the best experience by checking the system requirements for your product at https://www.pearsonmylabandmastering.com/system-requirements/
	   Need help? For help with MyLab Math for Canvas, go to https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get_started.htm
	
	If you have TECHNICAL DIFFICALTIES with MyMathLab:
	If something appears to be not working on MyMathLab, click on the **HELP** link.
	*Usually, it is not the website that is the problem, but a setting on your computer**.***
	For example, if the videos do not play, you probably do not have the updated software.
	> You may email MyMathLab technical support team (Contact Us button) or call at
	   1-800-677-6337 Monday through Friday 8am to 8pm and Sunday 5pm to 12am.
	
	If you have MATH QUESTIONS:
	If you are in MyMathLab working on a problem and would like to e-mail me about a concern, hit the tab "Ask My Instructor." This sets up an e-mail with my address and the problem that you are working on. Then add a detailed description in the box (P.S. Questions like "*I don't understand this problem*" will be answered "*What EXACTLY you don't understand?*" Please describe what steps you took to solve a problem, and which part of the problem is still confusing.

STUDY TIME	This is a 4-unit course, meaning you are expected to spend **at least 8–12 hours a week** outside the class for hw, class/test preparation, extra help, workshops, etc.
IMPORTANCE OF PRACTICING DAILY	To read more about the **Forgetting Curve**, go to: https://www.learningsolutionsmag.com/

GRADING	Tests (3) – 36% Homework – 10% Online Quizzes – 5% Classwork/Prep.work – 5% Pop-quizzes – 9% Project 1 – 5% Project 2 – 10% Final exam – 20%						
		Letter Grade	A	B	C	D	F
		Percentage	90-100%	80-89%	70-79%	60-69%	59 or less

GRADES CATEGORIES EXPLANATION	Your final grade is based on the number of points you earn according to the course grading policies (see above). Here's the explanation of each grading category: ***Tests (3) (36%),*** [*each test is 12% of total grade*]***:*** There will be 3 closed book tests. Most of your grade is based on these exams. The exams are on paper, you will need your calculator, and will be advised to show your work. ***Homework (10%) – online:*** • Must be completed on MyMathLab **by the due date** <mark>**by 11:00 pm**</mark> **(see calendar)**. • **TIP**: When get stack: use your notes, read an ebook or watch a video on MyMathLab • HW may be completed in multiple log-ins • Each question is scored after you enter an answer and click the "**Check Answer**" button. If you enter an incorrect answer, you may change the answer and "**Check Answer**" again. After the third time entering an incorrect answer, you will be given the correct answer and will not be given credit for the question. But you may then click on "**Similar Question**" to get the question but with different numbers and answer. • It is highly recommended that you practice homework problems **DAILY**. ***Online Chapter Quizzes (5%) – online:*** • Must be completed online using MyMathLab **by due date** <mark>**by 11:00 pm**</mark>**, (see calendar)**. • Are based on the homework problems. • You have 5 attempts (different but similar questions each time), best score count • Once you begin a quiz, you must complete it before logging out or getting logged out due to inactivity. ***Class work (5%),*** **[Includes prep.work, class work, in-class activities]:** • **Prep.work** is distributed at the end of class or posted on Canvas and must be turned at the beginning of the next class (**3 lowest scores dropped**) • Includes vocabulary terms, rules, formulas needed for the new topic • Answers can be found in ebook • **Class work** is collected/checked at the end of or during the class period, no make ups. • Missed class = missed class work. • *Graded cumulatively at the end of the semester* **Pop-quizzes** *(9%):* • Open notes, and based on the prep.work questions (**3 lowest scores dropped**) • *Graded cumulatively at the end of the semester* ***Projects (15%):*** • There are 2 projects conducted individually or in group of 2 people • Project 1 = 5% of total grade; Project 2 = 10% of total grade • Collected on due date (NOT ACCEPTED AFTER DUE DATE FOR ANY REASON) • See guidelines and rubrics in the attachment ***FINAL EXAM (cumulative) – 20%***
IMPORTANT DATES	Last day to drop without "W" and with refund: **03 SEP 2018** Last day to drop with "W": **09 NOV 2018**

MAKE UP AND LATE POLICY	- An exam can be made up if you miss a class due to a **serious** reason **Make up exam must be taken <u>no later</u> than before next class session or before test day.** - <u>Homework must be completed by the due date, otherwise **30%** penalty apply if completed a day later **until 7:00pm**</u>. After 7:00 pm no extensions. **Online Quizzes are subject to 50% penalty if completed next day, till 11:00am only.** **No prep.work / class work** accepted if missed the class, but 3 lowest scores dropped, so if you are late 3 times, or have 3 absences, it will not effect the overall score.
EXTRA HELP	**Me! I am here to help you! Contact me via email for any questions or concerns, arrange office hours meeting!** - Tutoring is available to AVC students free of charge at the **Learning Center** - LEARNING CENTER WEBSITE: www.avc.edu/studentservices/lc/math for workshops - The MyMathLab website, www.pearsonmylab.com, offers detailed solutions to problems, tutorials, PowerPoint summaries, and more. - You may create a discussion on MyMathLab or Canvas to discuss your question with your peers - www.khanacademy.org, www.purplemath.com **NetTutor** (accessible from Canvas) - Please share with the class any website you find useful for you to learn math
EXTRA CREDIT	2% Extra Credit can be earned if you make an introduction appointment (5–7 min.) to meet with instructor <u>within the first 3 weeks</u>. - Sign up for the appointment using Canvas calendar. - Occasional 2% of extra credit might be earned on some tests by submitting paper test review **with all work shown and stapled to the back of the review**. (will be announced in class) - In order to receive any extra credit a test review must be clear, neat, <u>stapled</u>, with work shown for each question (attach scratch paper with work to the review). - Reviews that are not stapled, inaccurate, messy, <u>without</u> work or w/incomplete work **will not** be considered.
ASSISTANCE	A limited amount of class time is available to answer questions. I recommend using e-mail correspondence, study groups, tutors and video materials in the Learning Center and Math Lab. *Copying* from the solutions manual or another student's work is a form of <u>plagiarism</u> and will result in sanctions ranging from a warning, denial of credit, and/or dean referral. As well as not doing well on the exams.
CALCULATOR	Graphing calculator (**TI-84 or TI-83**) may be used in class and during tests (**make sure you know how to use your calculator before test**). **No cell phone calculators**.
FOOD & DRINKS	NO food is allowed in the classroom. The only liquid permitted is water in plastic bottles with sport tops.
ACCOMMODATIONS	If you have a legally protected disability under the ADA or California Discrimination Law and you believe you need reasonable accommodation to participate fully in this class, *please discuss this with me privately*.
SHERIFF'S OFFICE	In case of emergency call campus police **661-722-6399**
HOW TO EMAIL INSTRUCTOR	- Put "Math 115" in the subject line (DO NOT PUT YOUR NAME IN THE SUBJECT LINE) - Start with "Hello" or "Hi" - Write a clear and concise message using academic language. - Sign with your name.

I am here to help you learn and succeed in this class!

If you have any questions or concerns about class, please feel free to contact me.

Tentative** Course Schedule (Pacing Calendar) and Important Dates

wk	Day	Date	Material covered	Notes
1	Mon	08-20	Syllabus / Course material / policies	
	Wed	08-22	1.1 Statistical & Critical Thinking / 1.2 Types of Data	
	Fri	08-24	1.3 Collecting Sample Data 2.1 Frequency Distributions for Organizing & Summarizing Data	
2	Mon	08-27	2.2 Histograms / 2.3 Graphs That Enlighten or Deceive	
	Wed	08-29	3.1 Measures of Center	
	Fri	08-31	3.2 Measures of Variation	
3	Mon	09-03	Labor Day Holiday – College Closed	Last day to drop w/o "W"
	Wed	09-05	3.3 Measures of Relative Standing & Boxplots	
	Fri	09-07	Ch. 1 – 3 Review	
4	**Mon**	**09-10**	**Test #1 (ch. 1 – 3)**	**Project 1 due**
	Wed	09-12	4.1 Basic Concepts of Probability	
	Fri	09-14	4.2 Addition Rule & Multiplication Rule	
5	Mon	09-17	4.3 Complements, Conditional Probability	
	Wed	09-19	4.4 Counting	
	Fri	09-21	5.1 Probability Distributions	
6	Mon	09-24	5.2 Binomial Probability Distributions	
	Wed	09-26	6.1 The Standard Normal Distribution	
	Fri	09-28	6.2 Real Applications of Normal Distributions	
7	Mon	10-01	6.4 The Central Limit Theorem	
	Wed	10-03	Ch. 4 – 6 Review	
	Fri	10-05	Ch. 4 – 6 Review	
8	**Mon**	**10-08**	**Test #2 (ch. 4 – 6)**	
	Wed	10-10	7.1 Estimating a Population Proportion	
	Fri	10-12	7.2 Estimating a Population Mean	
9	Mon	10-15	8.1 Basics of Hypothesis Testing	
	Wed	10-17	8.2 Testing a Claim About a Proportion	
	Fri	10-19	8.3 Testing a Claim About a Mean	
10	Mon	10-22	9.1 Two Proportions	
	Wed	10-24	9.2 Two Means: Independent Samples	
	Fri	10-26	9.3 Two Dependent Samples (Matched Pairs)	
11	Mon	10-29	Ch. 7 – 9 Review / Project presentations	
	Wed	10-31	Ch. 7 – 9 Review / Project presentations	
	Fri	11-02	Ch. 7 – 9 Review / Project presentations	
12	**Mon**	**11-05**	**Test #3 (ch. 7 – 9)**	**Project 2 due**
	Wed	11-07	10.1 Correlation	
	Fri	11-09	10.2 Regression	Last day to drop w/ "W"
13	Mon	11-12	11.1 Goodness-of-Fit	
	Wed	11-14	11.2 Contingency Tables	
	Fri	11-16	12.1 One-Way ANOVA	
14	Mon	11-19	Ch. 10 – 12.1 Review	
	Wed	11-21	Ch. 10 – 12.1 Review	
	Fri	11-23	Thanksgiving Holiday – College Closed	
15	Mon	11-26	Final Review	
	Wed	11-28	Final Review	
	Fri	11-30	Final Review	
16	Mon	12-03	Final Review	
	Wed	**12-05**	**Final Exam**	
	Fri	12-07	Grades Discussion	

Calendar of Due Dates of the Assignments

wk	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1	**August 20** *Fall semester begins*	Aug-21	Aug-22	Aug-23	Aug-24	Aug-25	Aug-26 **MML sign up**
2	Aug-27 **HW 1.1–1.3**	Aug-28	Aug-29 **QUIZ 1**	Aug-30	Aug-31 **HW 2.1–2.3**	Sep-01	Sep-02 **QUIZ 2**
3	Sep-03 LABOR DAY *Last Day to Drop w/o "W"*	Sep-04	Sep-05	Sep-06	Sep-07 **HW 3.1–3.3**	Sep-08	Sep-09 **QUIZ 3** **MML registration**
4	*SEP-10* **TEST 1 (CH.1-3)** **Project 1 Due**	Sep-11	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16
5	Sep-17	Sep-18	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
6	Sep-24 **HW 4.1–4.4**	Sep-25	Sep-26 **QUIZ 4**	Sep-27	Sep-28 **HW 5.1–5.2**	Sep-29	Sep-30
7	Oct-01 **QUIZ 5**	Oct-02	Oct-03	Oct-04	Oct-05 **HW 6.1–6.4**	Oct-06	Oct-07 **QUIZ 6**
8	*OCT-08* **TEST 2 (CH.4-6)**	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
9	Oct-15	Oct-16	Oct-17 **HW 7.1–7.2**	Oct-18	Oct-19 **QUIZ 7**	Oct-20	Oct-21
10	Oct-22 **HW 8.1–8.3**	Oct-23	Oct-24 **QUIZ 8**	Oct-25	Oct-26	Oct-27	Oct-28
11	Oct-29	Oct-30	Oct-31 **HW 9.1–9.3**	Nov-01	Nov-02 **QUIZ 9**	Nov-03	Nov-04
12	*NOV-05* **TEST 3 (CH.7-9)** **Project 2 Due**	Nov-06	Nov-07	Nov-08	Nov-09 *Last Day to Drop w/"W"*	Nov-10	Nov-11
13	Nov-12	Nov-13	Nov-14 **HW 10.1–10.2**	Nov-15	Nov-16	Nov-17	Nov-18
14	Nov-19 **HW 11.1–11.2**	Nov-20	Nov-21 **HW 12.1**	*Nov-22* Happy Thanksgiving	*Nov-23*	Nov-24	Nov-25
15	Nov-26	Nov-27	Nov-28	Nov-29	Nov-30	Dec-01	Dec-02
16	Dec-03	Dec-04	*DEC-05* **FINAL EXAM**	Dec-06	Dec-07 *Grades discussion*	Dec-08	

IF YOU MISS A CLASS	• **Contact your classmates** regarding any missed announcements, schedule changes, topics covered, etc. • Study the missed material **BEFORE** next class (**otherwise, you might be lost with new topic**): contact your classmates to get notes, watch videos on MyMathLab, read ebook and make notes. • Visit tutors at the Learning Center for help (they are awesome!) • Visit instructor with specific questions (sorry – but no lecture can be given during the office hours as a substitution for missed class due to time limit and in respect to other students' questions).

Course Content (COR)

1. Summarizing data graphically and numerically;
2. Descriptive statistics: measures of central tendency, variation, relative position, and levels/scales of measurement;
3. Sample spaces and probability;
4. Random variables and expected value;
5. Sampling and sampling distributions;
6. Discrete distributions – Binomial;
7. Continuous distributions – Normal;
8. The Central Limit Theorem;
9. Estimation and confidence intervals;
10. Hypothesis Testing and inference, including t-tests for one and two populations, and Chi-square test;
11. Correlation and linear regression and analysis of variance (ANOVA);
12. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education; and
13. Statistical analysis using technology such as SPSS, EXCEL, Minitab, or graphing calculators.

Upon completion of course, the successful student 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. 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.

PROJECT 1 (covers material learned in chapters 1 through 3) – 5% of the total grade
You will collect data on the chosen topic (list of topics to be distributed in class at the end of the 1st week), tabulate your data, and build a stem and leaf plot. You will then create a histogram to represent your data, and the boxplot with five-number summary. You will write a short summary of your findings.
The examples of topics include but is not limited to:
- Number of Languages spoken
- Number of Facebook friends
- How many hours of T.V. you watch per week
- Number of jeans you owe
- Number of hours on electronic games per week
- Number of pictures on your phone, etc.
The project is due on the day of the test #1. No late submission is accepted for any reason.

PROJECT 2 (covers material learned in chapters 7 through 9) – 10% of the total grade
Testing a claim about a population proportion or mean.
This is a group project. You will work in a group of 2 to collect and compare the data on two populations proportion or mean. The list of the topics, guidelines and the rubrics will be distributed in class at the end of the 6th week and is due on the day of the test #3 (see calendar). Projects and findings will be presented in class by each group during week 11. Examples of topics include but is not limited to:
- Study the amount of time required to stand in line at the grocery store between two different stores. Define Store 1 as the store that has the longer mean wait time. Perform a test of hypothesis to determine whether the wait time at Store 1 is greater than the wait time at Store 2. Also analyze the standard deviations of the wait times for each store. If one store's data has a greater standard deviation than the other, what does this mean in the context of the problem? This project can be modified to collected wait times from two fast food restaurants, two banks, etc.
- Study airline prices versus the distance between cities. Select 35 cities around the country to which one could fly from Los Angeles. Identify other variables that might affect the cost of an airline ticket. This project could also be extended to compare prices by flying out of the Los Angeles Airport (LAX) versus flying out of the Burbank Airport (BUR). Perform a test of hypothesis to determine if there is a significant difference in average price when flying out of Los Angeles versus flying out of Burbank.
- Do a survey to determine student preference regarding the timing of Spring Break. Ask the students if they would prefer Spring Break to coincide with the surrounding public schools or colleges. The survey instrument should indicate the age and gender of the student. Provide information regarding the percentage of students who want Spring Break at various points within the semester. Construct confidence intervals for all percentage data.
- Study and compare the average commute times from home to college by instructors and students, or males and females, etc.
- Study and compare the average study times for male and female students, or students in different age groups
- Is the proportion of females who prefer Coke-a-Cola over Pepsi greater than the proportion of males who do?
- Is the proportion of tracks higher in Palmdale or Lancaster campuses, etc.
The project is due on the day of the test #3. No late submission is accepted for any reason.

Notice to all students

Leave the excuses at the door.
If you didn't do your homework, just admit it.
If you didn't understand the assignments, ask for help.
If you didn't study for the test,
accept the grade and resolve to do better
(with my help if necessary) next time.
If you refuse to follow my rules,
accept the consequences.
This is not a democracy,
This is MY classroom:
and I'm here for one reason and one reason only:

TO TEACH YOU
TO INSPIRE YOU
TO HELP YOU GROW

I'll do my part. The rest is up to you.

Remember, just because something is difficult, doesn't mean you shouldn't try. It means you should just try harder.

Now, if you agree with the syllabus and would like to continue with me on a journey of learning Statistics this Fall 2018 semester:
SIGN, DATE, DETACH THE BOTTOM PART AND RETURN SIGNED PART BACK TO ME.
Keep this syllabus and refer to it whenever you have questions about the course set up.

- -

I, _____, have read the syllabus
         (NAME - Last, First)
for Math 115 and understand the course policies and procedures. I will do my best to succeed in the course and will ask my instructor if I have any questions or concerns.

Signature _____   Date _____

One more quote (one of my favorite) for you:

"I hope that in this year to come, you make mistakes.

Because if you are making mistakes, then you are making new things,

trying new things, learning, living, pushing yourself, changing

yourself, changing your world. You're doing things you've never done

*before, and more importantly, **you're doing something**.*

So that's my wish for you, and all of us, and my wish for myself.

Make new mistakes.

Make glorious, amazing mistakes.

Make mistakes nobody's ever made before.

Don't freeze, don't stop, don't worry that it isn't good enough, or it

isn't perfect, whatever it is: art, or love, or work or family or life.

*Whatever it is you're scared of doing, **do it**. Make your mistakes, next*

year and forever."

~Neil Gaiman

Instructions: Use this form to propose an honors section of a course. Honors sections of courses must fulfill all requirements of the Course Outline of Record, but they are distinguished from traditional courses in a number of ways:
- Innovative and active teaching learning method
- Depth and breadth of material
- Emphasis of critical thinking
- Use of technology, supplemental readings, practical applications

The following criteria will help the Honors committee to determine if the course will be distinguished from a non-honors course. **Please be very detailed and specific in your responses**.

Course Number and Title: MATH 115 – Statistics (Bowers)

Check which of he following honors objectives will be bet by the proposed course?
_____Course will provide content about the history or background of the field being studied.
___X___Course will show an awareness of some of the field's major theories or current trends.
___X___Course will require students to perform a case study, field experience, or other application.
___X__ Course utilizes research methods including proper documentation for the discipline.
___X__ Course will help students to demonstrate critical thinking and/or meta-cognitive abilities.

1. **Please provide an overview of your proposed course. Be sure to show how it differs from the traditional course. Please provide a copy of the syllabus for the traditional course (included it at the end of this document)**

   As stated in the Course Description, "Statistics is a 4-unit introductory course in statistical procedure that includes the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education."

   In addition to the above topics, this section MATH 115 (H) will further develop an application of the knowledge of statistical concepts to everyday life. Students will be conducting two research projects: collecting, organizing and analyzing data using the boxplot with 5-number summary, and conducting a hypothesis test of a claim made about two population proportions.

   The examples of topics for the first project (worth 5% of the total grade):

   - Number of Languages spoken
   - Number of Facebook friends
   - How many hours of T.V. you watch per week
   - Number of jeans you owe
   - Number of hours on electronic games per week
   - Number of pictures on your phone, etc.

The examples topics for the second project (worth 10% of the total grade):

- Study the amount of time required to stand in line at the grocery store between two different stores. Define Store 1 as the store that has the longer mean wait time. Perform a test of hypothesis to determine whether the wait time at Store 1 is greater than the wait time at Store 2. Also analyze the standard deviations of the wait times for each store. If one store's data has a greater standard deviation than the other, what does this mean in the context of the problem? This project can be modified to collected wait times from two fast food restaurants, two banks, etc.

- Study airline prices versus the distance between cities. Select 35 cities around the country to which one could fly from Los Angeles. Identify other variables that might affect the cost of an airline ticket. This project could also be extended to compare prices by flying out of the Los Angeles Airport (LAX) versus flying out of the Burbank Airport (BUR). Perform a test of hypothesis to determine if there is a significant difference in average price when flying out of Los Angeles versus flying out of Burbank.

- Do a survey to determine student preference regarding the timing of Spring Break. Ask the students if they would prefer Spring Break to coincide with the surrounding public schools or colleges. The survey instrument should indicate the age and gender of the student. Provide information regarding the percentage of students who want Spring Break at various points within the semester. Construct confidence intervals for all percentage data.

- Study and compare the average commute times from home to college by instructors and students, or males and females, etc.

- Study and compare the average study times for male and female students, or students in different age groups.

- Is the proportion of females who prefer Coke-a-Cola over Pepsi greater than the proportion of males who do?

- Is the proportion of tracks higher in Palmdale or Lancaster campuses, etc.

2. **Explain how the course will be flexible in format and teaching methodologies. Describe how the course will strive for a greater degree of student participation and involvement.**

This course will be structured in a student-centered way, inquiry-based endeavor designing to provide meaningful, engaging and applicable statistical experience. The students will be introduced to the main concepts of statistics through the use of the flipped-classroom techniques. Students will be asked to prepare definitions and vocabulary terms before the lesson, and then use those definitions to study particular topics.

3. **What activities, assignments, or readings will provide greater depth and breadth of subject matter? Describe writing assignments and discuss how the course will foster critical thinking?**

Besides the preparation assignments students will be given frequent short quizzes on the preparation topics to ensure students' readiness. Additionally, students will give a presentation on their projects. The students will have an opportunity to work on the group projects with their peers and learn from each other.

4. **What supplemental readings will be assigned and how will independent reading be determined and assessed? Explain research opportunities, documentation style, and/or how primary/secondary sources will be utilized.**

Besides the required textbook ("Elementary Statistics" by Mario Triola), students will be encourage to explore statistical significance and reliance by reading some articles and deciding on the reliability of the sources. Statistics is a science that involves asking questions about the world and situations and finding answers to then in a scientific way. Students will discuss their findings and conclusions in class using critical thinking and statistical analysis.

5. **What ideas do you have for field trips, guest speakers, and opportunities to attend related cultural and social events, if applicable?**

Currently I am not planning to have any field trips or guest speakers in this course.

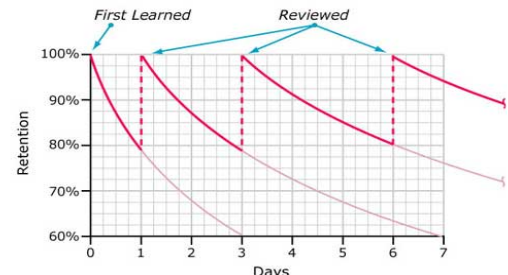6. **The course fulfills which of the following (check all that apply):**
   ____X___General education requirement
   ____X___Major requirement
   _____Elective only

FALL 2018
Math 115: *STATISTICS*   (HONORS)

COURSE INFO	**CRN** 71749 **Units** 4
TIME/LOCATION	**Mon / Wed / Fri 11:00a–12:10a APL 114**
INSTRUCTOR	*Snizhana Jane Bowers* e-mail: sbowers@avc.edu phone: (661) 722-6300 ext. 6947
OFFICE HOURS	Office **UH 150** MON → 1:00–2:30p WED → 1:00–2:00p (and by appointment) TUE → 1:00–2:30p THUR → 1:00–2:00p

PREREQUISITES	Completion of Intermediate Algebra (Math 102) or CPT eligibility for any college-level math course is an absolute requirement. Please note that good algebraic skills and eligibility for college-level reading are necessary to be successful in this course.
COURSE DESCRIPTION	Statistics is a 4-unit introductory course in statistical procedure that includes the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. (CSU, UC, AVC)
STUDENT LEARNING OUTCOME (SLO)	1. Organize, draw, interpret, calculate summary measures for univariate & bivariate data sets. 2. Solve probability problems involving the concepts of independent events, mutually exclusive events, conditional probability, binomial distribution, and normal distribution. 3. Determine and interpret confidence interval estimates of population means and population proportions. 4. Perform hypothesis tests: one-population proportion, one-population mean, chi-square goodness-of-fit and chi-square independence.
ATTENDANCE, TARDINESS AND ABSENCES	• IF you are to be successful in this class, it is important to attend **all** classes. • Missing more than 2 classes without a VERY serious reason may result in a drop for non-attendance. Please be aware that an absence for whatever reason is still an absence. • If a student is absent for *2 consecutive classes* without notifying the instructor, the instructor reserves a right to drop a student without further notice. • Excessive tardiness (3) will count as 1 absence. • Notify your instructor by email of any absence ahead of time or right away when you miss a class. Provide a reason for your absence. • **DO NOT schedule any counselor, doctor's, dental, financial aid, etc. appointments, and job interviews during class sessions. Remember, absence for whatever reason is still an absence.** • *YOU are responsible for all announcements made in class regardless of your absence!*
CLASSROOM AND CELL PHONE POLICIES	• It is instructor's responsibility to maintain a comfortable classroom environment that is conducive to learning; therefore, if your behavior is disturbing for the learning process taking place in the classroom, you will be asked to leave the classroom, and receive a tardy point; you also might face the consequences described in the AVC Student Code of Conduct at https://www.avc.edu/information/policies/studentcode. • Disruptive behavior includes: prolonged chattering, making offensive remarks, using cell phone, eating or drinking in class, as well as academic violations such as cheating on the exam by looking at other student work, or coping someone's HW assignment. • **Be respectful to your classmates, your instructor, and yourself.** • **CELL PHONE USE IS PROHIBITED FOR ANY REASON IN THE CLASSROOM. If you must to make or answer a call/text, step outside. You will be asked to leave the classroom if you keep using your cell phone for any reason during the lesson.**

REQUIRED MATERIAL	• **MyMathLab access @ www.mymathlab.com** (REQUIRED) • **Course ID – bowers38308** (comes with ebook), *printed book is OPTIONAL* If you would like to purchase a printed book – it is "***Elementary Statistics CA edition***, 3rd edition**, by Mario F. Triola ISBN 9781323750148 or standalone access code ISBN 9781323617144
HELP WITH MYSTATLAB	***How to Get Started with MyMathLab (MyStatLab):*** 1. Sign in to **Canvas** and enter your Canvas course. 2. Do one of the following: 　> Select any **Pearson** link from any module 　> Select a **MyLab and Mastering** link in the Course Navigation 3. Select **Open MyLab and Mastering** or a content link. 4. Get access to your course Pearson content: 　> If you have a Pearson account (you have an account if you have ever used a Pearson MyLab 　　product): Enter your Pearson account **username** and **password** to Link Accounts. 　> If you don't have Pearson account: select **Create** and follow the instructions. 5. Select an access option. 　> Enter the access code that came with your textbook or was purchased separately 　　from the bookstore. 　> Buy access using a credit card or PayPal account (Access code is also available at the 　　Marauder bookstore) 　> If available, get temporary (14 day) access by selecting the link near the bottom of 　　the page. 7. From the *You're Done!* page, select **Go To My Courses**. 　**Note**: It is recommended that you always enter your MyLab Math course through Canvas. Get 　your computer ready For the best experience by checking the system requirements for your 　product at 　https://www.pearsonmylabandmastering.com/system-requirements/ 　**Need help?** For help with MyLab Math for Canvas, go to 　https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get_started.htm ***If you have TECHNICAL DIFFICALTIES with MyMathLab:*** If something appears to be not working on MyMathLab, click on the **HELP** link. *Usually, it is not the website that is the problem, but a setting on your computer.* For example, if the videos do not play, you probably do not have the updated software. > You may email MyMathLab technical support team (Contact Us button) or call at 　**1-800-677-6337** Monday through Friday 8am to 8pm and Sunday 5pm to 12am. ***If you have MATH QUESTIONS:*** If you are in MyMathLab working on a problem and would like to e-mail me about a concern, hit the tab "Ask My Instructor." This sets up an e-mail with my address and the problem that you are working on. Then add a detailed description in the box (P.S. Questions like "*I don't understand this problem*" will be answered "*What EXACTLY you don't understand?*" Please describe what steps you took to solve a problem, and which part of the problem is still confusing.
STUDY TIME	This is a 4-unit course, meaning you are expected to spend **at least 8–12 hours a week** outside the class for hw, class/test preparation, extra help, workshops, etc.
IMPORTANCE OF PRACTICING DAILY	 To read more about the **Forgetting Curve**, go to: https://www.learningsolutionsmag.com/

GRADING	Tests (4) – 40 % Homework – 10 % Online Quizzes – 10 % Classwork/Prep.work/Pop-up quizzes – 5% Project 1 – 5% Project 2 – 10% Final exam – 20 %					
	Letter Grade	A	B	C	D	F
	Percentage	90-100%	80-89%	70-79%	60-69%	59 or less

| GRADES CATEGORIES EXPLANATION | Your final grade is based on the number of points you earn according to the course grading policies (see above). Here's the explanation of each grading category:

Tests (40%), [*each test is 10% of total grade*]***:***
There will be 4 closed book tests. Most of your grade is based on these exams. The exams are on paper, you will need your calculator, and will be advised to show your work.

Homework (10%) – online:
 • Must be completed on MyMathLab **by the due date by 11:00 pm (see MML)**.
 • **TIP**: When get stack: use your notes, read an ebook or watch a video on MyMathLab
 • HW may be completed in multiple log-ins
 • Each question is scored after you enter an answer and click the "**Check Answer**" button. If you enter an incorrect answer, you may change the answer and "**Check Answer**" again. After the third time entering an incorrect answer, you will be given the correct answer and will not be given credit for the question. But you may then click on "**Similar Question**" to get the question but with different numbers and answer. Again, you have three tries to get it correct and when you do, you get credit for the question.
 • It is highly recommended that you practice homework problems **DAILY**.

Online Chapter Quizzes (10%) – online:
 • Must be completed online using MyMathLab **by due date by 11:00 pm, (see MML)**.
 • Are based on the homework problems.
 • You have 5 attempts (different but similar questions each time), best score count
 • Once you begin a quiz, you must complete it before logging out or getting logged out due to inactivity.
 • **Quizzes are a good indication of how you are going to do on the tests – assuming you completed quizzes using only YOUR knowledge.**

Class work (5%), [Includes prep.work, class work, pop-up quizzes, in-class activities]***:***
 • **Prep.work** is distributed at the end of class or posted on Canvas and must be turned at the beginning of the next class (**3 lowest scores dropped**)
 • Includes vocabulary terms, rules, formulas needed for the new topic
 • Answers can be found in ebook
 • **Class work** is collected/checked at the end of class period, no make ups.
 Miss class = miss class work.
 • **Pop-up quizzes** are open notes, and based on the prep.work questions (**3 lowest scores dropped**)
 • *Graded cumulatively at the end of the semester*

Projects (15%):
 • There are 2 projects conducted individually or in group of 2 people
 • Project 1 = 5% of total grade; Project 2 = 10% of total grade
 • Collected on due date (NOT ACCEPTED AFTER DUE DATE FOR ANY REASON)
 • See guidelines and rubrics in the attachment

FINAL EXAM (cumulative) – 20% |
| **IMPORTANT DATES** | Last day to drop without "W" and with refund: **03 SEP 2018**
Last day to drop with "W": **09 NOV 2018** |

MAKE UP AND LATE POLICY	• An exam can be made up if you miss a class due to a **serious** reason • **Make up exam must be taken <u>no later</u> than before next class session or before test day.** • <u>Homework must be completed by the due date, otherwise **30%** penalty apply if completed a day later **until 11pm**</u>. After 11pm no extensions • **Online Quizzes are subject to 50% penalty if completed next day, open till 11pm only. (** • **No prep.work / class work** accepted if missed the class, but 3 lowest scores dropped, so if you are late 3 times, or have 3 absences, it will not effect the overall score.
EXTRA HELP	• **Me! I am here to help you! Contact me via email for any questions or concerns, arrange office hours meeting!** • Tutoring is available to AVC students free of charge at the **Learning Center** • LEARNING CENTER WEBSITE: www.avc.edu/studentservices/lc/math for workshops • The MyMathLab website, www.pearsonmylab.com, offers detailed solutions to problems, tutorials, PowerPoint summaries, and more. • You may create a discussion on MyMathLab or Canvas to discuss your question with your peers • www.khanacademy.org, www.purplemath.com, • **NetTutor** (accessible from Canvas) • Please share with the class any website you find useful for you to learn math
EXTRA CREDIT	• 2% Extra Credit can be earned if you make an introduction appointment (5–7 min.) to meet with instructor <u>within the first 3 weeks</u>. • Sign up for the appointment using Canvas calendar. • Occasional 2% of extra credit might be earned on the test by submitting paper test review **<u>with all work shown and stapled to the back of the review</u>**. (will be announced in class) • In order to receive any extra credit a test review must be clear, neat, <u>stapled</u>, with work shown for each question (attach scratch paper with work to the review). • Reviews that are not stapled, inaccurate, messy, <u>without</u> work **will not** be considered.
ASSISTANCE	A limited amount of class time is available to answer questions. I recommend using e-mail correspondence, study groups, tutors and video materials in the Learning Center and Math Lab. *Copying* from the solutions manual or another student's work is a form of <u>plagiarism</u> and will result in sanctions ranging from a warning, denial of credit, and/or dean referral. As well as not doing well on the exams.
CALCULATOR	Scientific or graphing calculator may be used in class and during tests (**make sure you know how to use your calculator before test**). **No cell phone calculators allowed**.
FOOD & DRINKS	NO food is allowed in the classroom. The only liquid permitted is water in plastic bottles with sport tops.
ACCOMMODATIONS	If you have a legally protected disability under the ADA or California Discrimination Law and you believe you need reasonable accommodation to participate fully in this class, *please discuss this with me privately*.
SHERIFF'S OFFICE	In case of emergency call campus police **661-722-6399**
HOW TO EMAIL INSTRUCTOR	• Put "Math 115" in the subject line (DO NOT PUT YOUR NAME IN THE SUBJECT LINE) • Start with "Hello" or "Hi" • Write a clear and concise message using academic language. • Sign with your name.

I am here to help you learn and succeed in this class!
If you have any questions or concerns about class, please feel free to contact me.

Tentative** Course Schedule (Pacing Calendar) and Important Dates

wk	Day	Date	Material covered	Notes
1	Mon	08-20	Syllabus / Course material / policies	
	Wed	08-22	1.1 Statistical & Critical Thinking / 1.2 Types of Data	
	Fri	08-24	1.3 Collecting Sample Data 2.1 Frequency Distributions for Organizing & Summarizing Data	
2	Mon	08-27	2.2 Histograms / 2.3 Graphs That Enlighten or Deceive	
	Wed	08-29	3.1 Measures of Center	
	Fri	08-31	3.2 Measures of Variation	
3	Mon	09-03	Labor Day Holiday – College Closed	Last day to drop w/o "W"
	Wed	09-05	3.3 Measures of Relative Standing & Boxplots	
	Fri	09-07	Ch. 1 – 3 Review	
4	**Mon**	**09-10**	**Test #1 (ch. 1 – 3)**	**Project 1 due**
	Wed	09-12	4.1 Basic Concepts of Probability	
	Fri	09-14	4.2 Addition Rule & Multiplication Rule	
5	Mon	09-17	4.3 Complements, Conditional Probability	
	Wed	09-19	4.4 Counting	
	Fri	09-21	5.1 Probability Distributions	
6	Mon	09-24	5.2 Binomial Probability Distributions	
	Wed	09-26	6.1 The Standard Normal Distribution	
	Fri	09-28	6.2 Real Applications of Normal Distributions	
7	Mon	10-01	6.4 The Central Limit Theorem	
	Wed	10-03	Ch. 4 – 6 Review	
	Fri	10-05	Ch. 4 – 6 Review	
8	**Mon**	**10-08**	**Test #2 (ch. 4 – 6)**	
	Wed	10-10	7.1 Estimating a Population Proportion	
	Fri	10-12	7.2 Estimating a Population Mean	
9	Mon	10-15	8.1 Basics of Hypothesis Testing	
	Wed	10-17	8.2 Testing a Claim About a Proportion	
	Fri	10-19	8.3 Testing a Claim About a Mean	
10	Mon	10-22	9.1 Two Proportions	
	Wed	10-24	9.2 Two Means: Independent Samples	
	Fri	10-26	9.3 Two Dependent Samples (Matched Pairs)	
11	Mon	10-29	Ch. 7 – 9 Review / Project presentations	
	Wed	10-31	Ch. 7 – 9 Review / Project presentations	
	Fri	11-02	Ch. 7 – 9 Review / Project presentations	
12	**Mon**	**11-05**	**Test #3 (ch. 7 – 9)**	**Project 2 due**
	Wed	11-07	10.1 Correlation	
	Fri	11-09	10.2 Regression	Last day to drop w/ "W"
13	Mon	11-12	11.1 Goodness-of-Fit	
	Wed	11-14	11.2 Contingency Tables	
	Fri	11-16	12.1 One-Way ANOVA	
14	Mon	11-19	Ch. 10 – 12.1 Review	
	Wed	11-21	Ch. 10 – 12.1 Review	
	Fri	11-23	Thanksgiving Holiday – College Closed	
15	**Mon**	**11-26**	**Test #4 (10 – 12.1)**	
	Wed	11-28	Final Review	
	Fri	11-30	Final Review	
16	Mon	12-03	Final Review	
	Wed	12-05	Final Review	
	Fri	**12-07**	**Final Exam**	

Due Dates of the Assignments

wk	Day	Date	Material covered	DUE BY 11:00pm
1	Mon	08-20	Syllabus / Course material / policies	
	Wed	08-22	1.1 Statistical & Critical Thinking / 1.2 Types of Data	
	Fri	08-24	1.3 Collecting Sample Data 2.1 Frequency Distributions for Organizing & Summarizing Data	
2	Mon	08-27	2.2 Histograms / 2.3 Graphs That Enlighten or Deceive	Ch. 1 due
	Wed	08-29	3.1 Measures of Center	
	Fri	08-31	3.2 Measures of Variation	Ch. 2 due
3	Mon	09-03	Labor Day Holiday – College Closed	Last day to drop w/o "W"
	Wed	09-05	3.3 Measures of Relative Standing & Boxplots	
	Fri	09-07	Ch. 1 – 3 Review	Ch. 3 due
4	**Mon**	**09-10**	**Test #1 (ch. 1 – 3)**	**Project 1 due**
	Wed	09-12	4.1 Basic Concepts of Probability	
	Fri	09-14	4.2 Addition Rule & Multiplication Rule	
5	Mon	09-17	4.3 Complements, Conditional Probability	
	Wed	09-19	4.4 Counting	
	Fri	09-21	5.1 Probability Distributions	
6	Mon	09-24	5.2 Binomial Probability Distributions	Ch. 4 Due
	Wed	09-26	6.1 The Standard Normal Distribution	
	Fri	09-28	6.2 Real Applications of Normal Distributions	Ch. 5 Due
7	Mon	10-01	6.4 The Central Limit Theorem	
	Wed	10-03	Ch. 4 – 6 Review	
	Fri	10-05	Ch. 4 – 6 Review	Ch. 6 Due
8	**Mon**	**10-08**	**Test #2 (ch. 4 – 6)**	
	Wed	10-10	7.1 Estimating a Population Proportion	
	Fri	10-12	7.2 Estimating a Population Mean	
9	Mon	10-15	8.1 Basics of Hypothesis Testing	
	Wed	10-17	8.2 Testing a Claim About a Proportion	Ch. 7 Due
	Fri	10-19	8.3 Testing a Claim About a Mean	
10	Mon	10-22	9.1 Two Proportions	
	Wed	10-24	9.2 Two Means: Independent Samples	Ch. 8 Due
	Fri	10-26	9.3 Two Dependent Samples (Matched Pairs)	
11	Mon	10-29	Ch. 7 – 9 Review / Project presentations	
	Wed	10-31	Ch. 7 – 9 Review / Project presentations	Ch. 9 Due
	Fri	11-02	Ch. 7 – 9 Review / Project presentations	
12	**Mon**	**11-05**	**Test #3 (ch. 7 – 9)**	**Project 2 due**
	Wed	11-07	10.1 Correlation	
	Fri	11-09	10.2 Regression	Last day to drop w/ "W"
13	Mon	11-12	11.1 Goodness-of-Fit	Ch. 10 Due
	Wed	11-14	11.2 Contingency Tables	
	Fri	11-16	12.1 One-Way ANOVA	
14	Mon	11-19	Ch. 10 – 12.1 Review	Ch. 11 Due
	Wed	11-21	Ch. 10 – 12.1 Review	
	Fri	11-23	Thanksgiving Holiday – College Closed	Ch. 12.1 Due
15	**Mon**	**11-26**	**Test #4 (10 – 12.1)**	
	Wed	11-28	Final Review	
	Fri	11-30	Final Review	
16	Mon	12-03	Final Review	
	Wed	12-05	Final Review	
	Fri	**12-07**	**Final Exam**	

Course Content (COR)

1. Summarizing data graphically and numerically;
2. Descriptive statistics: measures of central tendency, variation, relative position, and levels/scales of measurement;
3. Sample spaces and probability;
4. Random variables and expected value;
5. Sampling and sampling distributions;
6. Discrete distributions – Binomial;
7. Continuous distributions – Normal;
8. The Central Limit Theorem;
9. Estimation and confidence intervals;
10. Hypothesis Testing and inference, including t-tests for one and two populations, and Chi-square test;
11. Correlation and linear regression and analysis of variance (ANOVA);
12. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education; and
13. Statistical analysis using technology such as SPSS, EXCEL, Minitab, or graphing calculators.

Upon completion of course, the successful student 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. 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.

PROJECT 1 (covers material learned in chapters 1 through 3) – 5% of the total grade
You will collect data on the chosen topic (list of topics to be distributed in class at the end of the 1st week), tabulate your data, and build a stem and leaf plot. You will then create a histogram to represent your data, and the boxplot with five-number summary. You will write a short summary of your findings.
The examples of topics include but is not limited to:
- Number of Languages spoken
- Number of Facebook friends
- How many hours of T.V. you watch per week
- Number of jeans you owe
- Number of hours on electronic games per week
- Number of pictures on your phone, etc.
The project is due on the day of the test #1. No late submission is accepted for any reason.

PROJECT 2 (covers material learned in chapters 7 through 9) – 10% of the total grade
Testing a claim about a population proportion or mean.
This is a group project. You will work in a group of 2 to collect and compare the data on two populations proportion or mean. The list of the topics, guidelines and the rubrics will be distributed in class at the end of the 6th week and is due on the day of the test #3 (see calendar). Projects and findings will be presented in class by each group during week 11. Examples of topics include but is not limited to:
- Study the amount of time required to stand in line at the grocery store between two different stores. Define Store 1 as the store that has the longer mean wait time. Perform a test of hypothesis to determine whether the wait time at Store 1 is greater than the wait time at Store 2. Also analyze the standard deviations of the wait times for each store. If one store's data has a greater standard deviation than the other, what does this mean in the context of the problem? This project can be modified to collected wait times from two fast food restaurants, two banks, etc.
- Study airline prices versus the distance between cities. Select 35 cities around the country to which one could fly from Los Angeles. Identify other variables that might affect the cost of an airline ticket. This project could also be extended to compare prices by flying out of the Los Angeles Airport (LAX) versus flying out of the Burbank Airport (BUR). Perform a test of hypothesis to determine if there is a significant difference in average price when flying out of Los Angeles versus flying out of Burbank.
- Do a survey to determine student preference regarding the timing of Spring Break. Ask the students if they would prefer Spring Break to coincide with the surrounding public schools or colleges. The survey instrument should indicate the age and gender of the student. Provide information regarding the percentage of students who want Spring Break at various points within the semester. Construct confidence intervals for all percentage data.
- Study and compare the average commute times from home to college by instructors and students, or males and females, etc.
- Study and compare the average study times for male and female students, or students in different age groups
- Is the proportion of females who prefer Coke-a-Cola over Pepsi greater than the proportion of males who do?
- Is the proportion of tracks higher in Palmdale or Lancaster campuses, etc.
The project is due on the day of the test #3. No late submission is accepted for any reason.

𝒩otice to all students

Leave the excuses at the door.
If you didn't do your homework, just admit it.
If you didn't understand the assignments, ask for help.
If you didn't study for the test,
accept the grade and resolve to do better
(with my help if necessary) next time.
If you refuse to follow my rules,
accept the consequences.
This is not a democracy,
This is MY classroom:
and I'm here for one reason and one reason only:

TO TEACH YOU
TO INSPIRE YOU
TO HELP YOU GROW

I'll do my part. The rest is up to you.

Remember, just because something is difficult, doesn't mean you shouldn't try. It means you should just try harder.

Now, if you agree with the syllabus and would like to continue with me on a journey of learning Basic Mathematics this Fall 2017 semester:
SIGN, DATE, DETACH THE BOTTOM PART AND RETURN SIGNED PART BACK TO ME.
Keep this syllabus and refer to it whenever you have questions about the course set up.

- -

I, _____, have read the syllabus
        (NAME - Last, First)
and understand the course policies and procedures. I will do my best to succeed in the course and will ask my instructor if I have any questions or concerns.

Signature _____   Date _____

One more quote (one of my favorite) for you:

"I hope that in this year to come, you make mistakes.
Because if you are making mistakes, then you are making new things,
trying new things, learning, living, pushing yourself, changing
yourself, changing your world. You're doing things you've never done
before, and more importantly, **you're doing something***.*
So that's my wish for you, and all of us, and my wish for myself.
Make new mistakes.
Make glorious, amazing mistakes.
Make mistakes nobody's ever made before.
Don't freeze, don't stop, don't worry that it isn't good enough, or it
isn't perfect, whatever it is: art, or love, or work or family or life.
Whatever it is you're scared of doing, **do it***. Make your mistakes, next*
year and forever."

~Neil Gaiman