

Math 1342.101H1 Elementary Statistical Methods Steam, Bldg. #22, <u>Room 105</u> Spring 2025 MW: 2 – 4:50 PM Hybrid

<u>This is a Hybrid course.</u> You will have some in class instruction and will be responsible for learning some of the material online via lecture videos/handouts provided by me AND/OR the provided Pearson resources.

Instructor Information: Kristi Kelley, kkelley9@com.edu, 409-933-8287

Student hours and location: Monday: 11 - 2 Office: STEAM 325.05

Tuesday: 10 - 11 Tutoring Center: Industrial Careers Building, Room 109 11 - 11:30 Office: STEAM 325.05 Wednesday: 11 - 2 Office: STEAM 325.05 Thursday and Friday: By appointment only

Send me an E-mail if you'd like to meet virtually during office hours. Join the Virtual Office Hours

Microsoft Teams: Join the class team by clicking the link or by using the join code: **s35u3wo** You need to use your COM credentials when logging into Microsoft Teams. You may need to un-install Teams and redownload the version for schools.

Pulse App: Download the Brightspace D2L Pulse App to get the announcements on your phone that I post to D2L. I will send reminders about assignments among other things through this app.

Outlook App: Download the outlook app on your phone to be able to check and send emails from your smartphone.

Calculate84: Download <u>Calculate84 on your iPhone</u> and <u>download Calc84 on your android</u>. to have an TI 84 calculator app on your phone. I do recommend buying one if you can, but if you cannot, this will work for your homework.

NOTE: 1. You will not be able to use this app in class on quizzes or exams. I will bring the TI 84 calculators for the exams.

2. See the library, STEM success coach, or Math success coach to try to check out a TI 84 calculator!

Required Textbook/Materials:

- 1. Textbook: Statistics: Informed Decisions Using Data with Integrated Review with Pearson eText Edition: 6 Textbook Purchasing Statement: E-Book is contained within MyLab Math in Brightspace/D2L.
- 2. An access code for MyMathLab is required to access the e-text and course assignments. *The cost of the access code is included in tuition for this course.* <u>DO NOT OPT OUT OF THE COURSE MATERIALS OR YOU WILL LOSE ACCESS TO MyMATHLAB!</u> You will go to D2L to access MyMathLab.







3. Required Technology: A TI-84 Plus graphing calculator is required for this course. A TI-89 or higher or a TI-Nspire are not permitted. Internet capability and a computer is required to gain access to course materials and online assignments via MyMathLab software. Computers and internet access are available on campus during specified times. Some devices like iPads/tablets, Chromebooks, and cellphones present problems with gaining access to online MyLab Math assignments. Due to this, do not use these devices when taking an online quiz. Note: MyLab Math generally does not like Safari. Download Chrome or Firefox if you have an Apple computer.

For Math 1342 in class quizzes and exams, a COM issued TI 84 Plus calculator will be provided and required. It is recommended you purchase your own TI-84 Plus calculator to use during lectures and on homework to assist with learning the appropriate keystrokes. HOWEVER, you can download an app called <u>Calculate84</u> on your smartphone to use at home which has almost all the features of the TI 84 Plus CE calculator.



Recommended Materials:

-A small 3 ring binder (to keep class notes in)

-Spiral bound notebook (to do your homework in) OR notebook paper and a bradded folder -Pens and Pencils (You MUST complete your exam with a pencil or ERASEABLE pen) -index cards -highlighters

Points may be deducted for use of a non-erasable pen.

Course Description: This course includes collection, analysis, presentation, and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing.

Course requirements:

- Homework: Online MyMathLab homework assignments will be given each week for every section covered in the course. Homework assignments will count as 15% of your final grade.
 - There may be additional homework assignments assigned during class throughout the semester.
- Quizzes: Four online MyMathLab quizzes will be given. One before each exam. <u>Cumulatively, the quizzes will count</u> as 10% of your final grade. *There may be in class quizzes given at any time.*
- Unit Exams: Four exams will be given. The first Three exams are short answer paper exams given in class. The last exam will be short answer exam taken online. You are required to submit your scratch work to D2L for the online exam. If you do not submit scratch work or submit scratch work that does not reflect the methods taught in class or the textbook, you are subjected to losing points on the exam. For the in-class exams, a paper review and videos going over the review will be provided. For the online exams, an online MyMathLab review will be provided. To be successful on the exams, it is crucial for you to complete the exam reviews and have a strong understanding of the material. Questions on the exam can come from reviews, homework problems, or quiz problems. The exams count as 60% of your grade.

We will review for the exam in class IF time permits.

• Final Exam: The final exam is comprehensive. The final exam will count as 15% of your grade and will replace your lowest exam grade if it is higher AND your participation grade is above a 70%.

Determination of Course Grade/Detailed Grading Formula:

Your overall average/grade will be located in you MML Course. We will NOT be using the D2L gradebook to keep up with your overall average.

Grading Formula:

The course average will be determined using the following formula:

Final Average = .60(Exam Average) +.15(Final Exam) +.15(Homework)+.10(Quizzes)

Grading Scale:

The course grade will be determined using the following scale:

Grade A: Final Average [89.5, 100] Grade B: Final Average [79.5, 89.5) Grade C: Final Average [69.5, 79.5) Grade D: Final Average [59.5, 69.5) Grade F: Final Average [0, 59).

Classroom Policies:

Class Expectations

- 1) Arrive on time and <u>have a productive workspace</u> by the time class begins.
 - Get out your writing utensils (pencil or erasable pen), notebook paper, daily handout, and approved calculator out on your desk.
 - Put away cell phone, laptop, or any electronic device, *including your earbuds.* Preferably, put in your backpack. Put your backpack/purse on the floor between your feet/under the desk.

The only thing you need on your desk is your writing utensils, calculator, and handout/paper!!

2) Be <u>engaged</u> in the lecture.

- Keep your cell phone, laptop, and any electronic devices put away during lecture.
- Take notes.
- Answer questions directed towards you or the class.
- Complete independent/group work as assigned.
- 3) Remain in the class the entire time IF possible.

4) If you miss a class, it is your responsibility to make sure to take notes from the recorded class sessions or prerecorded lecture videos in D2L. Simply copying someone else's notes may not be sufficient for understanding the material.

Remember, arriving late, leaving early, being on your cell phone during class can disrupt the learning environment for both you and your classmates, as well as the instructor. These behaviors can cause you to lose participation points.

Participation Grade Information

Participation Grading Criteria

Your participation grade is an important part of your overall grade and is based on several factors: Attendance, Preparedness, Note-taking, Class Participation, Cell Phone Usage

Points Deduction

You will lose participation points for behavior that goes against the classroom expectations: Arriving more than 10 minutes late, leaving more than 10 minutes early, not printing the lecture notes, being on your cell phone during class time, not taking notes, not working on problems assigned during class, being disrespectful to your peers or the instructor, etc.

Note: each class session counts as 1 participation point.

Each "offense" will result in losing half a participation point for the class session.

Participation Grade Formula = $\frac{\text{total participation points}}{\text{total class days}} * 100$

Attendance Policy

- To do well in this course, it's important to attend all classes regularly, arrive on time, and stay in class the entire time class is in session. Attending all classes will help you stay on track with the material, understand the concepts thoroughly, and perform well on assessments and assignments. Your active participation in class discussions and activities will also contribute to your overall learning experience and success in the course. Arriving late, leaving early, and leaving class frequently disrupts the learning environment, impacts your success in the course, and will affect your participation grade.
- For in class courses, when students miss 5 or more classes, the faculty member can initiate an instructor drop and, subsequently, the student will receive a W for the course. For an online class, when students are not actively participating (contributing to discussions and completing weekly online homework), the faculty member can initiate an instructor drop and, subsequently, the student will receive a W for the course.

There are no excused absences.

Late work, Make-Up Policy, Extra Credit Policy:

Late Work

Each homework and quiz have a set due date. You can complete homework and quizzes after the due date until 11:59 PM on the day of the exam. Each homework question worked after the due date will receive a 10% late penalty. The late penalty applies only to questions worked after the due date and not the entire assignment.

Homework and quizzes will close on the day of the exam at 11:59 PM and <u>will not be re-opened.</u>

Make-Up Exams

There are no make-up exams. If you miss an exam, your final exam will replace that exam grade at the end of the semester. If you know you are going to miss an exam, you can take the exam prior to the exam date in the testing center.

Extra Credit Policy

<u>There is NO extra credit for this course.</u>

Exam Policies:

Testing Policy

- 1. Use the restroom before you start the exam.
- 2. Cell phones need to be turned OFF. An exam will not be given to you until you show me your cell phone is turned off.
- 3. ALL electronic devices need to be turned OFF and placed in your backpack or purse.
- 4. Your backpack/purse needs to be put on the ground next to your feet/chair.

If I see you on your cell phone or with a "cheat sheet" during the test, you will receive a zero for the exam and will be referred to the Dean of Students. <u>If you leave the classroom at any time during an exam, the exam must be</u> <u>submitted for grading.</u> If you are not feeling well, let me know in advance of distributing the exam and the exam will be given one page at a time. Therefore, it is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

Submitting Exam Scratch Work for Online Exams

You will be **REQUIRED** to submit your work for the online exam following the guidelines below. You will submit your work to Assignments in D2L as a SINGLE PDF file. I will select problems to grade your work on. Problems that lack work to justify your answer or are not worked out using the methods taught in class or the Pearson resources, will lose points for those problems. If you do not submit scratch work to D2L (or email me if you are having trouble submitting your work) in a timely manner (within 30 minutes), your exam grade will be reduced by 5%.

Exam scratchwork needs to be submitted using the following criteria or will not be accepted:

1) Pages must be numbered and submitted in the correct order

2) Problems must be numbered and worked according to the methods provided in the instructor's lecture videos and/or Pearson resources. Problems worked via methods not appropriate for this course may not be given credit. Scratchwork that is not legible will not be graded.

3) You must take pictures of your scratchwork using a smart phone, convert to a SINGLE PDF FILE (multiple PDFs will not be accepted) using a PDF converter app such as AdobeScan, and upload to D2L within 15 minutes of completing the exam.

Additional Information:

- I. If you are having trouble uploading your scratch work to D2L or converting pictures of your work to a single PDF file, e-mail me a picture of your work, and then I can help you upload your scratch work.
- II. Work that is submitted more than 30 minutes after completing the exam will lose 10 points on the exam.
- III. Work that is not submitted will lose 20 points on their exam.

Exam Pre-requisites: There is a pre-test quiz that contains testing instructions that must be completed prior to the exam opening.

Success Tips

- 1) Read the sections in your textbook that we are going to cover in class to gain a deeper understanding.
- 2) Come to class EVERYDAY unless sick or an emergency arises.
- 3) When in class, BE PRESENT.
 - Stay off your phone.
 - Take good notes.
 - Work problems that I may assign during class.
 - Participate in class by answering my questions or asking questions if you need clarification.
- 4) Start on your MML homework ASAP after class.
 - Convert the information from short term to long term memory ASAP to remember the material better.
 - Need to start the assignment while the information is the freshest in your brain.
 - The longer you wait to start an assignment the harder the assignment will be!
- 5) Work on your math skills DAILY. The more you practice the better you'll get <3
- 6) Get help AS SOON AS you are struggling..(student hours or tutor center)
- 7) PREPARE for your exams!
 - Complete the online review and paper review.
 - Re-do the review until you can complete ALL problems without looking at any resources.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS)

Academic Dishonesty: College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents of academic and scholastic dishonesty (including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent will College Policy and the Student Conduct. Any student found to have been academically dishonest on an assignment, quiz, or exam will receive a zero for that assignment, quiz, or exam, and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the section on Standards of Student Conduct and Discipline and Penalties in the online Student Handbook.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Mr. Leslie Richardson, Math Department Chair, at (409) 933-8329 or at https://www.nc.action.com.

Student Learner Outcome	Assessed via this Assignment	Maps to Core Objective	Assessed via this Assignment
1. Explain the use of data collection and statistics as tools to reach reasonable conclusions	Quiz 1		
2. Recognize, examine, and interpret the basic principles of describing and presenting data	Quiz 1	Empirical and Quantitative Skills (EQS)	Question on Exam 1
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics	Quiz 3	Critical Thinking Skills (CT)	Question on Exam 2
4. Explain the role of probability in statistics	Quiz 3		
5. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables	Quiz 4		
6. Describe and compute confidence intervals	Quiz 5		
7. Solve linear regression and correlation problems	Quiz 2		
8. Perform hypothesis testing using statistical methods	Quiz 6		

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook <u>https://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.pdf</u>. An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact: Kimberly Lachney, Student Accessibility Services Coordinator Phone: 409-933-8919 Email: <u>AccessibilityServices@com.edu</u> Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is February 26. The last date to withdraw for the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <u>https://www.com.edu/community-resource-center/</u>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at <u>deanofstudents@com.edu</u> or <u>communityresources@com.edu</u>.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.

Wk	Dates	Math 1342.101H1 MW 2-5PM					
1	Jan 13-19	M			Brief Course Introduction (D2L, MML)		
		SS		1.1	Introduction to the Practice of Statistics	Th-Jan 16	
		cla		1.2	Observational Studies vs. Designed Experiments	Th-Jan 16	
				1.3	Simple Random Sampling	Th-Jan 16	
		In	W	2.1	Organizing Qualitative Data	Su-Jan 19	
				2.2	Organizing Quantitative Data: The Popular Displays	Su-Jan 19	
		Online			MML Orientation, Syllabus Video	Su-Jan 19	
					Syllabus Scavenger Hunt	Su-Jan 19	
				1.4	Other Effective Sampling Methods	Su-Jan 19	
				1.5	Bias in Sampling	Su-Jan 19	
		ľ		1.6	The Design of Experiments	Su-Jan 19	
2	Jan	× v	М		Holiday		
20 – 26 *Holiday:		- clas	W	3.1	Measures of Central Tendency	Su-Jan 26	
				3.2	Measures of Dispersion	Su-Jan 26	
	1/20	In		3.3	Measures of Central Tendency and Dispersion from	Th-Jan 30	
					Grouped Data		
		Online	;	2.4	Graphical Misrepresentations of Data	Su-Jan 26	
3	Jan 27 – Feb		Μ	3.3	Measures of Central Tendency and Dispersion from	Th-Jan 30	
2		SS			Grouped Data (ctd)		
		cla		3.4	Measures of Dispersion and Outliers	Th-Jan 30	
		-u	W	3.5	The Five-Number Summary Boxplots	Su-Feb 2	
		I		4.1/4.2	Scatter Diagrams, Correlation, and the Coefficient of	Th-Feb 6	
				Determination/Least Squares Regression (On Exam 2)			
	Online			<i>Review for Exam 1 (Ch. 1, 2, 3)</i>	Su-Feb 2		
4	Feb 3-9		М		Exam 1 (In class) – Monday 2/3	M-Feb 3	
		SS		5.1	Probability Rules	Th-Feb 6	
		cla		5.2	The Addition Rule and Complements	Th-Feb 6	
		- In-	W	5.2	The Addition Rule and Complements (ctd)	Su-Feb 9	
				5.3	Independence and the Multiplication Rule	Su-Feb 9	
				5.4	Conditional Probability and the General Multiplication Rule	Su-Feb 9	
		Online		5.5	Counting Principles	Su-Feb 9	
5	Feb 10 - 16	class	М	6.1	Discrete Random Variables	Th-Feb 13	
			117	6.2	The Binomial Probability Distribution	Th-Feb 13	
		In-	W	7.1	Properties of Normal Distribution (On Exam 3)	Th-Feb 20	
				7.2	Applications of Normal Distribution (<i>On Exam 3</i>)	Th-Feb 20	
		Online			Review for Exam 2 (Ch. 4, 5, 6)	$Su-Feb \ 16$	
6	E-1 17 22		м		From 2 (In close) Mandau 2/17	SU-Feb 16	
0	Feb 17 - 23	sst	IVI	0 1	Exam 2 (In class) – Wonday 2/17 Distribution of Somple Mary	WI-Feb I7	
		cla	W 7	0.1	Distribution of Sample Preparties	111-FCD 20	
		In	vv	0.2	Distribution of Sample Proportion	SU-FED 23	
		Ouling		9.1	Bruing a Population Proportion (On Exam 4)	111-Fe0 27	
		Online			Review for Exam 5 (Cn.7,8)	Su-Feb 23	
7 Feb 24 –			М		Exam 3 (In class) – due Monday 2/24	M-Feb 24	
<i>'</i>	Mar 2	Ś	111	9.2	Estimating a Population Mean	Th-Feb 27 Th-	
		las		10.1	Language of Hypothesis Testing	Feb 27	
		u-c	W	10.2	Hypothesis Tests for a Population Proportion	Su-Mar 2	
		Ι		10.3	Hypothesis Tests for a Population Mean	Su-Mar 2	
		Online		11.1	Inferences on two Population Proportions	Su-Mar 2	
		Chine			Review for Exam 4 (Ch 9.10)	Su-Mar 2	
					Exam 4 (online) – due Mondav 3/3	M-Mar 3	
					· · · · · · · · · · · · · · · · · · ·		
8	Mar 3 - 9	SS	М		Review for Final Exam	T-Mar 4	
		In- cla	W		Final Exam – Wednesday 3/5	W-Mar 5	