The instructor may modify the provisions of the syllabus to meet individual class needs by informing the class in advance as to the changes being made.

BASIC COURSE INFORMATION

MATH 1342 – Elementary Statistics: Three semester hours credit. Collection, analysis, presentation, and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. Use of appropriate technology is recommended.

Instructor: Kelly Ward   Office Location and Hours: Meeting location and time by appointment
Phone: 409.224.0272   Email Address: kward@angelina.edu or kward@brookelandisd.net

INTENDED STUDENT OUTCOMES

Objectives will be assessed with projects, essays, embedded test questions and/or other assignments.
- ✓ Critical Thinking: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- ✓ Communication: to include effective development, interpretation and expression of ideas through written, oral and visual communication
- ✓ Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Upon successful completion of this course, students will…
- ✓ Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- ✓ Recognize, examine, and interpret the basic principles of describing and presenting data.
- ✓ Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
- ✓ Explain the role of probability in statistics.
- ✓ Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
- ✓ Describe and compute confidence intervals.
- ✓ Solve linear regression and correlation problems.
- ✓ Perform hypothesis testing using statistical methods.

MATERIALS

- ✓ *Elementary Statistics Picturing the World* by Larson and Farber (Pearson ISBN 978-0-13-598929-6), 7th Edition MyStatLab and eText.
- ✓ Graphing calculator: A graphing calculator is required. The TI-84 graphing calculator will be used by the instructor in classroom demonstrations.

EVALUATION AND GRADING

Your grade will be assessed by the following:
- ✓ Four tests valued at 100 points each for a total of 400 points.
- ✓ Pearson MyStatLab assignments valued at 100 points.
- ✓ Project valued at 50 points.
- ✓ A comprehensive final examination valued at 100 points. The final exam grade will be used a second time to replace any one missed test or the lowest test grade during the semester.

ATTENDANCE
MATH 1342 is fully online. To receive credit for attendance, you must log into MATH 1342 in Blackboard at least once per week and spend at least 30 minutes in MyStatLab each week. Attendance is required per Angelina College Policy and will be recorded each week. Any student who misses 2 or more "weeks" of work may be dropped from the class. *During your school's official BREAKS, you do not have to log into Blackboard or complete work in MyStatLab to be counted present.*

TIME COMMITMENT
College Advisors recommend that students spend an additional two hours per credit hour each week for studying/completing assignments. Thus, you should expect to spend at least nine hours per week (including watching the videos and completing assignments) to experience success in MATH 1342.

STUDENT CONDUCT
Cheating on tests is not tolerated as per Angelina College policy and may result in expulsion from the course. AI programs such as ChatGPT, Bard, Snapchat AI, and Photomath may be used to aid in learning the material but cannot be used during tests. Often, students learn from working with peers. You are encouraged to discuss assignment problems and their solutions with classmates. However, it is NOT permissible to copy solutions from another student. Rule of Thumb for assignments (not tests): If discussing a problem with a peer helps you understand it, you may submit the solution for grading. It is NOT permissible to discuss any aspect of any test until ALL students have completed the test. Wait until at least the Monday after the test due date to discuss a test with anyone else.

INSTITUTIONAL POLICIES
This course conforms to the policies of AC as stated in the Angelina College Handbook. For detailed information on Angelina Institutional Policies, see the Concourse Syllabus in Blackboard. You will find information on Institutional Attendance Policy, Educational Accommodations, Notice of Non-Discrimination, Technology Requirements, Password Management, Syllabus Modification, Academic Integrity, Course Assistance, Technical Support, Tutoring, Testing Center, Roadrunner Central, Roadrunner Market, Grade Appeals, Student Handbook, AC Library, MyAC Portal, and Campus Security.

MATH 1342 COURSE CONTENT AND TOPICS

Week	Dates	Sections	Description
1	1.16 – 1.21	Intro 1.1 1.2 1.3	Syllabus; Blackboard content; MyLab Setup; eTextbook; Folder contents An Overview of Statistics **Meet and Greet Discussion Board** Data Classification Data Collection and Experimental Design Due 1.28.24
2	1.22 – 1.28	2.1 2.2 2.3	Frequency Distributions and Their Graphs More Graphs and Displays Measuring Central Tendency Due 1.28.24
3	1.29 – 2.4	2.4 2.5	Measures of Variation Measures of Position Due 2.4.24
4	2.5 – 2.11	**Test 1** 3.1 3.2	**Test 1: 1.1 – 1.3, 2.1 – 2.5** **Test 1 Due by 2.9.24 4pm** Basic Concepts of Probability and Counting Conditional Probability and the Multiplication Rule Due 2.11.24
5 – 6	2.12 – 2.18 2.19 – 2.25	 3.3 3.4 4.1 4.2	*Broaddus, Brookeland, and West Sabine Break 2.19 – 2.25* The Addition Rule Additional Topics in Probability and Counting Probability Distributions Binomial Distributions Due 2.25.24
7	2.26 – 3.3	**Test 2** 5.1	**Test 2: 3.1 – 3.4, 4.1 – 4.2** **Test 2 Due by 3.1.24 4pm** Introduction to Normal Distributions and the Standard Normal Distribution Due 3.3.24
8	3.4 – 3.10	5.2 5.3 5.4	Normal Distributions: Finding Probabilities Normal Distributions: Finding Values Sampling Distributions and the Central Limit Theorem Due 3.10.24
Break	3.11 – 3.17		*Angelina, Central Heights, Crockett, and Hudson Break*
9	3.18 – 3.24	5.5 6.1 6.2 6.3	Normal Approximations to Binomial Distributions Confidence Intervals for the Mean (σ Known) Confidence Intervals for the Mean (σ Unknown) Confidence Intervals for Population Proportions Due 3.24.24
10 – 12	3.25 – 3.31 4.1 – 4.7 4.8 – 4.14	 **Test 3** 7.1 7.2 7.3 7.4	*Apple Springs Break 3.25 – 3.31; Broaddus and West Sabine 4.1 – 4.7; Brookeland 4.8-4.14* **Test 3 Due by 4.12.24 4pm but best to** **Test 3: 5.1 – 5.5, 6.1 – 6.3** **complete Test 3 before Ch7 Work** Introduction to Hypothesis Testing; Review Flowchart Hypothesis Testing for the Mean (σ Known) Hypothesis Testing for the Mean (σ Unknown) Hypothesis Testing for Proportions Due 4.14.24
13	4.15 – 4.21	**Project** 8.1 8.2	**MATH1342 Core Assessment Project** Testing the Difference Between Means (σ Known) Testing the Difference Between Means (σ Unknown) Due 4.21.24
14	4.22 – 4.28	8.3 8.4 **Test 4** **Late**	Testing the Difference Between Means (Dependent Samples) Testing the Difference Between Proportions **Test 4: 7.1 – 7.4, 8.1 – 8.4** **Test 4 Due by 4.26.24 4pm** **Any Late Submissions Due** Due 4.28.24
15	4.29 – 5.5	9.1 9.2 9.3 Review	Correlation Linear Regression Measures of Regression No Late Submissions Accepted for Ch9 Review for Final Exam Due 5.5.24
16	5.6 – 5.7	**Final**	**Final: Tests 1 – 4 Material, 9.1 – 9.3** **Due 5.7.24 4pm**