TEXARKANA COLLEGE

Syllabus: Elementary Statistics
Course Number: Math 1442
Semester & Year:
Instructor Information

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Student Learning Outcomes for the Course

Upon completion of this course students should be able to:

1. Explain the use of data collection and statistics as a tool to reach reasonable conclusions.
2. Recognize, examine, and interpret the basic principles of describing and presenting data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.
5. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence interval.
7. Perform hypothesis testing using statistical methods.
8. Solve linear regression and correlation problems.

Textbook/Supply Information

    Textbook: not required

    Title: Beginning Statistics + Integrated Review, 3e

    Author: Warren, Denley, Atchley

    Publisher: Hawkes Learning

    Website: **http://learn.hawkeslearning.com**

    The Hawkes Learning software is a required component of this course. You will use Hawkes to complete and submit your homework (**15%** of your grade) and tests (**85%** of your grade).

    An Access Code registered in your name is required to use the software. Do not purchase your materials from an online vendor (other than Hawkes) or another student. These Access Codes may already be registered to another student, making them unusable.

    This access code can be purchased in the TC bookstore (ask for it at the front counter) or online through the Hawkes website: ISBN 978-1-64277-281-4

    See email on How to Enroll in Hawkes using Moodle for detailed instructions.

We are using a Mastery based approach in this course.

You must complete **all homework assignments** to access each practice test and each exam.

HOW TO USE HAWKES

Each lesson of the software offers three modes:

1. Learn is an interactive presentation of the material found in your textbook and includes instructional video clips and example problems.

2. Practice gives you access to unlimited practice problems, provides error-specific feedback for commonly made mistakes, hints for all incorrect answers, and includes an interactive Tutor with Step-by-Step guidance and fully worked out solutions. Note that every question type from Certify can be found in the Practice mode.

3. Certify is the homework portion of the lesson. After answering the set of questions, without exceeding the available strikes (or lives), you will receive a perfect 100% score for your homework. If you are not able to Certify in your attempt, you are able to start a new set of questions over again with no penalty.
    In the meantime, you may wish to spend more time in the Practice mode before attempting Certify again. You have unlimited attempts in each homework lesson. All assignments (except tests) are due at 11:59 pm on the given date.

Additional videos can be found at **www.hawkestv.com**.

GETTING HELP

Contact Hawkes with any technical questions, including creating your username and password, finding your Access Code or license number, or completing your work.

Phone support is available Monday-Friday, from 8:00am-10:00pm ET.

Chat support is available 24/7. Phone: 1.800.426.9538
Email: support@hawkeslearning.com
Chat: **www.hawkeslearning.com/chat**

Your grade in this course will be assessed through homework (Certify in Hawkes) and major tests **(in Hawkes)**. There will be 6 major tests over material covered and one Notes Test discussed under the Flipped Classroom in this document:

Test 1: Chapters 1 – 3
Test 2: Chapter 4
*Test 3: Chapter: 5
*Test 4: Chapters: 6 and 7
Test 5: Chapters 8 & 10
Test 6: Chapter 12
**Test 7: Notes Test

*While administered as two separate exams, a weighted average of these exams will be used to calculate your final grade. The Notes Test grade will not be included in Hawkes Learning either. Due to these differences, your grade in Hawkes will be different than your official grade in MyTC.

Student Assessment
Your final grade will be determined by the corresponding percentages.
    (1) Homework   15%
    (2) Chapter Tests   85%

Final Grade = 0.15*homework average + 0.85*chapter test average

Grading Scale: The following scale will be used to assign a letter grade for this course.
An average of 70 or better is required for credit.

Grade				
A	**B**	**C**	**D**	**F**
90-100	80-89	70-79	60-69	59-below

Tests: You may take a test **only** after all Certifies have been earned for that test.
NOTE: Certifies completed after their due date earn you no credit but will allow you to access the practice test and the actual test.
A practice test will be provided for each exam. You will have unlimited attempts at the practice test. These scores will not be included in your final grade.
Five bonus points will be awarded on each exam for those scoring an 80% or better on any attempt at the practice test.
 All tests will be administered through Hawkes Learning and will have a 90-minute time limit. All formulas and tables needed for each exam can be accessed through Moodle in the Resources section for each test.
NOTE: You only have **one** attempt on each test.

Calculators will be allowed on all course work. A TI-84+ or TI-83+ is HIGHLY recommended.

Make-up Policy
You will be allowed to take one exam late during the semester. If you miss any of the first 5 tests (this does not include Chapter 12), you may request a late exam under the following conditions.
    (1) Before the test deadline expires, you must submit an email request for late testing. Your subject line should read: Request for Delayed Testing. You must include a short paragraph explaining why you are missing the test and what you will do in the future to avoid a repeat occurrence.
    (2) Once you have received a confirmation reply granting your request:
        a) You must complete all late Certifies, but they will not be for credit.
        b) You must then complete the practice test for that chapter(s) and must score 80% but will not earn any bonus points for that score. You will be given two days at most to complete these tasks.
    (3) The test will then be taken. (At most, you will get **three** additional days on this material.)

NOTE: This is a one-time only offer. Any additional missed tests will be recorded as a zero with no option to make it up. (Remember each missed exam will lower your average by 17 points.)

Any student missing 2 major tests may be dropped from the course. It is not possible to pass the class with a C or better if you miss two exams. Students **may** have the homework/test due dates extended for excused absences, but this is a rare occurrence. (See Excused Absences under Attendance Policy)

Finally, all current assignments must be completed according to the schedule. You will get no additional time on these sections.

Delivery Method

Course sections containing an **HYB**—indicates the course combines face-to-face and online course delivery. A majority of the course will be delivered through online instruction. Students will also be expected to attend in person at regularly scheduled times.

Flipped Classroom
Before each class meeting you will be required to view and take notes in Learn. This is your best resource for understanding the material. To assist you with this process, I have provided a set of guided notes for you to use for each section. These are located under the Resources section of each exam. You will need to print these notes and have them filled out by the start of each class meeting. I will check these for completion and accuracy during the first 5 minutes of each class. Each day you bring your completed notes, you will maintain a 100% score on your Notes Test. Each day you fail to produce these notes, you will lose 5 points on the exam.
If you are absent from class, you must scan and email a copy of the completed notes by 11:59 pm of that day. If I can't read your document, I will not accept it.
Class time will be used to further investigate and discuss the material in each section. Each day, you will be paired with another student to be determined by the instructor. You will be given a short summary over the material to read with 3 questions to be answered. Some of these will be multiple choice, some will be short answer. You will have 10 minutes to complete this task. We will then discuss your answers and ask any questions.
You will then have several questions representative of the material to answer with your partner. After a short period of time (10 minutes), we will check and discuss your work. This process will be repeated for each section to be covered.
Once class is over you will have until 11:59 pm on the next class day to complete your Certifies (homework). What we go over on Monday is due on Wednesday. What we go over on Wednesday is due on Friday. What we go over on Friday is due on Monday.
Tests will come after all work for the exam has been completed. You will have one or two days to complete any late Certifies (not for credit) and access the practice test. Then one day to take the actual exam.
A detailed schedule has been provided with the date to have the Guided Notes completed and the day the assignments are due.

Attendance Policy
Attendance in a MATH course is extremely important! Every student has 3 absences. Three tardies will count as one absence. Arriving late (after the role has been checked), or leaving early (before the class is dismissed) will be counted as either a tardy or an absence as determined by the instructor.
Students may be dropped from the class for excessive absences (4 or more).

Texarkana College's absentee policy allows instructors to withdraw a student from a course due to excessive absences. If a student leaves and returns during class or leaves the class before the class is over, he/she **may** be considered absent. Three tardies constitute one absence.

Faculty members **are not** obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student's absence from class. Experience demonstrates that regular

attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.

A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of "F" in the class. The instructor will submit the last date of attendance for students receiving a grade of "F" or "W".
Withdrawal from a course(s) **may** affect a student's current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short- and long-term consequences of a withdrawal.

Excused Absences
A student's absence due to school trips and/or school business will not be counted against a student's allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only excused absences that are considered by Texarkana College. Responsibility for work missed for any absence is placed on the student. Instructors are required to allow students to make up work missed if the absence is due to military duty* or religious holy days when students follow the correct notification procedures. Instructors are not required to allow students to make up work for absences due to other reasons.
Students interested in Health Occupations should check with the division chair prior to entering the program.

Maximum Allowable Absences
After official registration, the following number of unexcused absences will be the maximum allowable before a student **may** be dropped from the class. For a four-hour Online Academic class, an instructor may withdraw a student from a course if they exceed 3 absences.

Classroom Behavior
Each student must respect the learning environment of others. There will be a **zero-tolerance** policy for any behavior that is disruptive to classroom learning.
This includes the use of vulgar language or rude behavior toward the instructor or any other student in the class as well as **cell phone usage or other devices** during class time.   Students who disrupt class will receive a warning and/or be asked to leave the class.

All phones are to be in **silent mode**, not on vibrate. **Any use** of the cell phone during scheduled class times must be cleared with the instructor prior to the class. Any unauthorized use will result in: a warning, either verbal or through email, for the first offense, an absence for the day on the second offense, and a drop from the course with an "F" on the third offense.

Any student observed sleeping will be marked absent for the day.

Academic Integrity Statement
Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature can result in the student being dropped from the class with an "F".

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at https://texarkanacollege.edu.

Academic Integrity and Use of AI Tools Policy
As members of the academic community, you are expected to uphold the highest standards of integrity. The advent of artificial intelligence (AI) tools offers new opportunities and challenges in our pursuit of knowledge and academic growth. To maintain fairness and integrity in our academic work, the following guidelines are established for the use of AI in this course:

Acceptable Use of AI Tools
1. Research Assistance: AI tools may be used for preliminary research and to assist in locating academic sources. Proper citations must be provided for any materials found via AI tools.
2. Skill Development: AI may be employed for skill development in areas such as coding, languages, and mathematical problem-solving. Use these tools responsibly to enhance your understanding rather than replace your learning efforts.

Prohibited Use of AI Tools
1. Assignments and Examinations: AI tools must not be used to generate content or answers for assignments, projects, quizzes, or exams. Submitting AI-generated work as your own is considered academic dishonesty.
2. Paraphrasing and Translation: Using AI to paraphrase text or translate assignments is not permissible if it disguises the source material without proper acknowledgment. All work submitted should be in your own words and reflect your own understanding.

Disclosure and Citation
1. Acknowledgment: If any AI tools are used to aid in your learning process (e.g., for brainstorming or editing), their use must be disclosed in a brief statement in your submission.
2. Citation: All AI-assisted content must be properly cited according to the appropriate academic style guide mentioned in this syllabus.

Consequences of Misuse
Violating this policy will result in disciplinary actions consistent with the College's Academic Integrity Policy, which may include failing the assignment, failing the course, or further disciplinary measures.

Disability Act Statement:
Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Tonja Blasé at 903.823.3349, or go by the Recruitment, Advisement, and Retention Department located in the Administration building for personal assistance.
If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. *It is best to request these changes at the beginning, if not before, the start of class* so there is ample time to make the accommodations.

Basic Needs Security
Any student who has difficulty affording groceries or accessing enough food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in this course or ability

to remain in school, is urged to contact Tonja Blasé, director of Student Retention, at 903-823-3349 for support.

Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

Financial Aid

Attention! Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.

Course Correspondence:

C**orrespondence** from the instructor will be given through the student's Texarkana College email account. Please check your email regularly for updates and announcements. Announcements may also be posted on Hawkes and sent to the email account you register with in Hawkes so make sure you are able to access your email.

A student may be **dropped** from this course for any of the following reasons:

    (1) Missing **2** major tests (You will not be able to pass the course with two zeros for test grades!)

    (2) Missing **10** homework assignments

    (3) Missing **4** days of class

    (4) Any breach of conduct. The instructor reserves the right to remove any student from the class for disruptive conduct which may result in the student being dropped with an **F** from this course (see Student Handbook).

Computer Requirement Policy:

Students are required to have a computer with Internet access for classes. The computer must be an actual computer – smart phones, iPads, Androids, Chromebooks, etc., are not acceptable substitutes because they lack software compatibility necessary to complete all assignments and tests. Financial costs for the necessary equipment and internet access are the responsibility of the student.

Students needing to purchase a computer may do so through the Texarkana College Bookstore. Systems purchased through the bookstore meet or exceed all requirements, are competitively priced, and may be purchased using financial aid funds. If the system is purchased through another source, it is the student's responsibility to ensure the system meets all requirements.

Computer systems requirements:

- Webcam, microphone, and speakers or headphones
- Windows 10 or a recent version of Mac OS (minimum Sierra). Windows 10 S mode is not supported
- Hardware capable of running Microsoft Teams (free download) and supports multi-media playback
- Support for Chrome or Microsoft Edge – Note: Firefox, Safari, or other browsers may not work on all TC applications
- Able to run Microsoft Office which will be provided free to TC students
- Adobe Reader or another PDF viewer
- Antivirus software such as Windows Defender or another 3rd party anti-virus solution
- The Respondus Lockdown browser is used for taking tests; therefore, the system must be capable of running this software. Most newer systems that meet other specifications should work.

Students should regularly backup content to prevent loss of coursework due to hardware failure. Backup copies of documents and other coursework may be placed on OneDrive cloud storage. OneDrive is included free of charge for all TC students.

A list of Internet service providers can be found on the TC website at: https://www.texarkanacollege.edu/coronavirus/.

Below you will find a general schedule for completing this course. A detailed schedule including the week, date the material is assigned and when it is due will be provided separately at the start of the semester. . Each due date will coincide with a class meeting giving you an opportunity to work the assignment and return to class with any questions before the assignment is due. The number listed in parentheses on each section title indicates the number of problems to be completed in Certify. **Note**: Problems may have more than one part/answer.

Class Assignments-Tentative Schedule

Week		Section	Title
1	W		**Discuss Flipped Class Format/Enroll in Hawkes**
		1.1	Getting Started (10)
		1.2	Data Classification (15)
	F	1.3	The Process of a Statistical Study-Sampling Methods (20)
		2.1	Frequency Distributions (10)
	M	2.2	Graphical Displays of Data (10)
		2.3	Analyzing Graphs-Shapes of Graphs (15)
2	W	3.1	Measures of Center (10}
		3.2	Measures of Dispersion (10)
	F	3.3	Measures of Relative Position (15)
		4.1	Introduction to Probability (15)
	M	4.2	Addition Rules for Probability (15)
		4.3	Multiplication Rules for Probability (15)
			Practice Test
			Chapters 1 - 3 Test
3	W	4.4	Combinations and Permutations (15)
		4.5	Combining Probability and Counting Techniques (10)
	F	5.1	Discrete Random Variables (15)
		5.2	Binomial Distribution (15)
			Practice Test
			Chapter 4 Test
	M	5.3	Poisson Distribution (10)
		5.4	Hypergeometric Distribution (10)
4	W	6.1	Introduction to the Normal Distribution (15)
		6.2	The Standard Normal Distribution (15)
			Practice Test
			Chapter 5 Test
	F	6.3	Finding Probability Using a Normal Distribution (10)
		6.4	Finding Values of a Normally Distributed Random Variable (10)

	M	6.5	Approximating a Binomial Distribution Using a Normal Distribution (15)
		7.1	Sampling Distributions and the Central Limit Theorem (10)
5	W	7.2	Central Limit Theorem with Means (15)
		7.3	Central Limit Theorem with Proportions (15)
	F	8.1	Estimating Population Means (σ Known) (15)
		8.2	Student's t-Distribution (15)
		Practice Test	
		Chapters 6 & 7 Test	
	M	8.3	Estimating Population Means (σ Unknown) (15)
		8.4	Estimating Population Proportions (15)
6	W	8.5	Estimating Population Variances (15)
		10.1	Fundamentals of Hypothesis Testing (20)
	F	10.2	Hypothesis Testing for Population Means (σ Known) (15)
		10.3	Hypothesis Testing for Population Means (σ Unknown) (10)
	M	10.4	Hypothesis Testing for Population Proportions (10)
		10.5	Hypothesis Testing for Population Variances (5)
7	W	10.6	Chi-Square Test for Goodness of Fit (5)
		12.1	Scatter Plots and Correlation (15)
		Practice Test	
		Chapters 8 & 10 Test	
	S	12.2	Linear Regression (10)
		12.3	Regression Analysis (5)
8		**Practice Test**	
		Chapter 12 Test	

Math classes can be very challenging, so I encourage you to work smartly and don't wait until the last minute to begin your assignments.
It is a lot of work, but you can be successful if you apply yourself and use all the resources available.
DO NOT ask for extra time to get your work completed.

The instructor reserves the right to amend the syllabus and class schedule as needed.