Dunlap-Stone University

Course Syllabus

MAT-160 Statistics

Credit Hours	3
Course Length	6 weeks
Course Description	This course demonstrates the use and application of modern statistical principles to solve problems and apply quantitative reasoning by examining the issues of variation of populations, probability, hypothesis testing, and statistical modeling.
Course Outcomes	By the end of this course, students will be able to: ● MATH-160-1 Define and describe the major terminology used in statistics. ● MATH-160-2 Apply scientific reasoning, problem solving, and quantitative analysis skills. ● MATH-108-3 Solve real world problems using math skills
Prerequisites	None
Required Materials	All materials are posted in the classroom.
Syllabus Acknowledge-ment Statement	Students are responsible for reading and understanding the syllabus. Continued participation in the course implies agreement to abide by the expectations, timelines, and academic integrity standards outlined herein.
Learning Resources	Students should utilize library resources provided at the main level of the classroom to support their learning and to master the course learning objectives. LIRN Library Resources Portal
Course Format	Each week in the course begins on Thursday and runs through Wednesday. Each new week's material will open on Wednesday. Please complete all of the required activities within the week. Late submissions may have deductions or may not be accepted.

Grading Scale	92-100 A	79-81 B-	65-68 D+
	89-91 A-	75-78 C+	62-64 D
	85-88 B+	72-74 C	<62 F
	82-84 B	69-71 C-	

Grading Criteria

Grades in this course are based on the quality, completeness, and clarity of your work in relation to the assignment instructions and stated learning outcomes. Each assignment is evaluated using a grading guide or rubric that outlines expectations for content, analysis, structure, and engagement with course materials. These are posted with each assignment.

How Your Work Is Evaluated

In general, you will earn full credit when your work:

- Directly addresses all parts of the assignment prompt
- Demonstrates critical thinking and a clear understanding of course materials
- Is well-organized, clearly written, and free of significant grammar or spelling errors
- Properly cites sources when appropriate

Points may be deducted for:

- Incomplete or off-topic responses
- Failure to apply course concepts or reference materials
- Weak organization, unclear writing, or frequent mechanical errors
- Missing components, such as citations or required sections

Grades for each assignment are posted in the Moodle gradebook.

Review grading rubrics before you begin each assignment and again before submission.

Be sure to save a copy of all submissions and review returned feedback carefully.

Instructor Expectations

Faculty members may post additional materials, requirements or make changes to this syllabus. Please contact your instructor with questions about specific criteria.

Learning Environment

This course is delivered fully online using distance education best practices. Students are expected to actively engage with their peers and instructor at least five (5) days each week. All courses are offered in English to students who meet the minimum entrance requirements and meet any published prerequisite requirements or program admission.

Technical Support

The classroom is accessed through the Moodle platform. **Technical support is available during business hours by calling 602.648.5750**.

Discussion and Participation

Active participation is essential to your success in this course and is a core component of Dunlap-Stone University's online learning model. All students are expected to engage meaningfully in weekly discussions to demonstrate their understanding of course concepts, apply critical thinking, and interact respectfully with peers and faculty.

Weekly Discussion Requirements

To earn full credit each week, you must complete both of the following:

- Direct Response Posts (4 total)
    - Respond directly to the weekly discussion prompts.
    - Submit one discussion question post per day, on at least four separate days of the week.

    - Each response should demonstrate thoughtful engagement and cite assigned readings or relevant external sources as appropriate.
- Participation/Peer Responses (5 total)
    - Reply meaningfully to posts made by classmates or the instructor.
    - Submit one peer response per day, on at least five separate days of the week.
    - Responses should advance the conversation by asking questions, offering new perspectives, or connecting to course materials.

Minimum total posts per week: 9 *Minimum days of participation per week: 5*

What Counts as a Substantive Post?

A substantive post should:

- Be at least 100–150 words
- Refer to course readings, lectures, or external resources
- Offer analysis, reflection, or application (not just agreement or summary)
- Use respectful, academic language

Participation Tips

- Spread your posts out throughout the week to meet the minimum day requirement.
- Log in early in the week to read discussion prompts and plan your responses.
- Review your classmates' contributions and refer back to previous posts in your replies.
- If you're unsure what to post, ask a question, connect with your own experience, or cite the lecture or textbook.

Late or Incomplete Participation

- Posts submitted after the weekly deadline may not be eligible for full credit.
- Failure to meet the minimum number of posts or days may result in a deduction.
- If you experience an emergency, contact your instructor or advising team as soon as possible.

Academic Integrity & Student Identity Verification

Dunlap-Stone University is committed to upholding the highest standards of academic integrity. As a student, you are expected to complete your own work, cite all sources accurately, and maintain honesty in all academic interactions. Academic integrity is not only a core institutional value—it is essential to your credibility and success as a professional. Carefully review the Academic Integrity Policy.

What Violates Academic Integrity?

Examples of academic dishonesty include (but are not limited to):

- Submitting work that is not your own, including assignments generated by AI or purchased from third parties
- Copying or paraphrasing another source without proper citation
- Using unauthorized assistance on quizzes or exams
- Falsifying data, citations, or academic records
- Submitting the same work in more than one course without prior approval

Your Responsibilities

By accessing the online classroom using your unique login credentials, you affirm that:

- You are the individual enrolled in the course
- All submitted work is your own, unless collaboration is explicitly permitted
- You will uphold DSU's academic integrity standards throughout your studies

Students are encouraged to review and apply proper citation practices, ask questions if unsure, and seek support early to avoid unintentional violations.

Consequences

Violations of academic integrity are taken seriously and may result in:

- A reduced grade or zero on the assignment
- Failing the course
- Academic probation or dismissal from the university

All violations are documented and reviewed according to DSU's official policy.

Intellectual Property Notice

Unless otherwise noted, materials within the classroom belong to the noted copyright holder. There is no expectation of privacy or ownership of the posting of the students or faculty members. Please use good judgment when posting within the classroom. In some courses, you may wish to carefully consider what information you choose to disclose about your organization or your organization's activities. Contact your organization's legal representation for more information about your company's intellectual property and disclosure rules. Refer to the catalog for more information about the expectations of student behavior.

Study Suggestions and Estimated Time to Complete Work

Depending on the level of this course and the number of credit hours assigned for this course, the estimated time to complete work varies. Each credit hour assigned in this course has been designed to represent 15 hours of direct engagement with course materials and 30 hours of preparation. This course is three credit hours in length and therefore represents 45 hours of engagement and 90 hours of preparation. **In a six week course, you should spend about 7.5 hours working in the classroom and about 15 hours in preparation.** You may need more or less time to complete this course.

Preparation can be classified in a number of ways. Reading assignments are based on the number of pages you are expected to read each week and the level of complexity of those reading materials (whether they contain a large number of technical terms or difficult concepts). Written assignments are generally based upon the number of pages you are expected to produce as noted in the assignment description. Studying for exams is estimated by the number of hours you would be expected to spend reviewing materials.

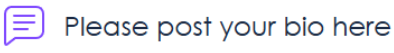
Direct engagement includes reviewing websites, posting and participating in discussion forums, reading materials, listening to audio content, and taking exams.

Student Success Strategies

Please carefully review the following information. Please reach out to your advisor or faculty member with any questions.

Week 1:

Under the "General" heading, review this syllabus thoroughly and make sure you understand the course expectations and how to navigate the classroom. Note the course learning outcomes and the link to Library services. Additional supplementary materials may be posted in this section.

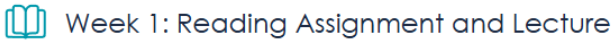


Post a brief introduction and biographical information introducing yourself to your peers and instructor.

Review any posts from your instructor or announcements in the News Forum.

Weekly:

You may wish to review your personal and professional obligations each week and designate what times you can schedule to complete the week's coursework.



Review the "Reading Assignment and Lecture" section of the classroom for the week and plan your activities for the week.

1. Week 1 Reading Assignments

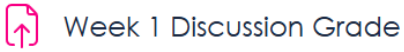
2. Week 1 Lecture

Reading the lecture, textbook, and supplemental materials. Review the required and supplemental readings for the week. This may include a textbook, articles, videos, additional documents, a lecture, etc. Confirm that you have all of the assigned readings and can access any supplemental materials noted.

Participate in discussion forums. To meet the discussion question and participation requirements for this course, you should answer the designated number of questions completely, referencing your reading whenever possible. Be sure to read each of your classmates' post, commenting meaningfully whenever possible and review your instructor's posts within the discussion questions as well. This is an opportunity to bring in your experiences and demonstrate your understanding of the course materials.

Affirming Participation and Discussion Question Completion

Each week, you will affirm your completion of at least 4 direct posts to discussion questions and participation over at least 5 days.



Click on the corresponding assignment, then attest in the text box your compliance and submit.

Completing and submitting assignments. Assignments are submitted through the Moodle assignment description.

Before submitting your assignment, carefully review the assignment and any rubrics that are included for grading. Read through your submission carefully, checking for errors in grammar or

spelling and to ensure that the content fully addresses the assignment. Give yourself extra time for a thorough review. Most assignments are due no later than midnight on Wednesday at the end of each week.

End of Course Survey

Complete the end of course survey in your final week.

Learning Outcomes Alignment	U-B Scientific and Quantitative Reasoning: Competency in scientific and quantitative reasoning includes the ability to locate, identify, collect, organize, analyze and interpret data, and the ability to use mathematics and the scientific method of inquiry to make decisions, where appropriate.
Important Policies	• Academic Integrity Policy • Student Code of Conduct • Student Bill of Rights • Student Complaint and Grievance Policy • Accessibility and ADA Accommodations Policy • Non-Discrimination and Title IX Policy • Student Records and Privacy (FERPA) Policy
DSU Contact Information	Dunlap-Stone University 16165 N 83rd Ave, Ste 200 Peoria AZ 85382 602.648.5750 info@dunlap-stone.edu www.dunlap-stone.edu

Course Matrix

Week 1	**Statistics Terminology and Concepts** Define and apply statistical terminology and concepts	Post your bio Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (10 points) Quiz (10 points)	29 points
Week 2	**Distribution** Identify different means to graph distributions and the appropriateness for each. Discuss means to summarize distributions.	Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (15 points) Quiz (12 points)	36 points
Week 3	**Bivariate Data** Define and describe bivariate data **Probability** Define and calculate probability	Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (15 points) Quiz (12 points)	36 points
Week 4	**Research Design** Define and describe research design **Distribution** Describe normal distribution	Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (10 points) Quiz (12 points)	31 points

	Discuss advanced graphs		
Week 5	**Sampling Distributions** Define and describe sampling distributions **Estimation** Discuss estimation as a mechanism in statistics **Logic of Hypothesis Testing** Discuss the process of hypothesis testing **Tests of Means** Define and describe tests of means	Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (15 points) Quiz (15 points)	39 points
Week 6	**Power** Define and describe power in statistics **Regression** Discuss regression in statistics **Additional Analysis Tools** Discuss the process of analysis of variance, transformations, and chi square	Read lecture and assigned readings Participation (5 points) Discussion Questions (4 points) Lesson Mini Quizzes (20 points) Final Exam (40 points)	69 points