



Fisher College Course Syllabus

MA121 Basic Statistics

Credits: 3

COURSE DETAILS

Course Description

This course is an introduction to the basic elements of pre-calculus statistics. Topics include descriptive statistics, basic probability, probability distributions, the Central Limit Theorem, and an introduction to statistical inference.

Course Learning Objectives

This course will provide students with the opportunity to:

1. Recognize and describe statistical variables and random-sampling methods.
2. Construct and explain graphical displays for both qualitative and quantitative data.
3. Calculate and interpret measures of central tendency for grouped and ungrouped data.
4. Calculate and interpret measures of variation for small data sets.
5. Solve problems involving basic and compound probabilities.
6. Solve problems involving the multiplication principle.
7. Solve problems involving combinations and permutations.
8. Calculate probabilities from discrete distributions
9. Calculate binomial probabilities using the binomial formula and the binomial table.
10. Calculate the expected value and standard deviation of a discrete probability distribution.
11. Calculate probabilities from the standard normal distribution by the empirical rule and table of areas.
12. Convert normal probabilities to standard normal probabilities by calculating z-scores.
13. Apply the Central Limit Theorem to calculate probabilities from sampling distributions.
14. Calculate probabilities from the Student's t-distribution.
15. Construct and interpret confidence intervals for small and large sample sizes.
16. Construct and interpret hypothesis tests for small and large sample sizes.

Achievement of learning objectives will be contingent on student effort, ability, and engagement.

Required Text and Other Materials

For the most current textbook information, please visit the bookstore:

<https://bookstore.mbsdirect.net/vbm/fisher.htm>



Grading Policy

Faculty will provide detailed grading policies in each class syllabus. Please refer to Blackboard once the term begins.

Fisher College Grading Scale

<u>Letter</u>	<u>Points</u>
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 or below

COURSE POLICIES

Attendance Policy

Attendance in online classes is determined by participation on discussion boards and Collaborate sessions. You will be counted absent for not participating in weekly discussion boards and Collaborate sessions (live or recorded).

Faculty will provide detailed attendance policies in each class syllabus. Please refer to Blackboard once the term begins.

If you believe you are likely to fail, you have the option of withdrawing from this course to avoid a negative impact on your GPA. The last day to withdraw is 10 days prior to the end of the term.

Blackboard Collaborate

Blackboard Collaborate participation is required in all Fisher College online courses. Participation is defined as attending the live environment, or watching a recorded session. Fisher College instructors offer an alternative (recordings) to the students who are unable to attend live, in an effort to keep online education as flexible as possible.



FISHER COLLEGE POLICIES

Communication

Students are required to use their Fisher College email addresses when communicating with faculty or administrators at Fisher College. This practice ensures proper security of student related communications. Communication in person or via email is expected to be professional and respectful. Violations are subject to disciplinary action as identified in the Student Code of Conduct Civility policy.

Student Accessibility Services Statement

Fisher College complies with federal legislation for individuals with disabilities (Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, and the ADAA of 2009) and offers reasonable accommodations to qualified students with disabilities. For accessibility purposes, some classes may be recorded.

For students who require classroom accommodations, please notify the Office of Student Accessibility Services/OSAS. Accommodations are arranged through OSAS, which will issue a confidential Disability Services Accommodation Form. This should be accomplished during the first two weeks of class. If you have questions about the process, please contact OSAS by calling 617-671-4429. You may also contact OSAS via email at OSAS@fisher.edu.

Class and Homework Expectations

The following chart outlines the number of hours that students should expect to spend in each 3-credit course.

	Class Format	Classroom Instruction	Online Instruction	Homework/ Out-of-Class	Total Hours per Week	Total Hours per Term
8-week term	Online	0	6	11	17	135
	Online w/ synchronous*	1	5	11	17	135
5-week term	Online w/ synchronous*	1	8	18	27	135
3-week term	Online w/ synchronous*	1	14	30	45	135

*For online classes with required synchronous sessions, there will be a mandatory 1 hour collaborate session each week



Academic Integrity Statement

All students are responsible for maintaining high standards of honesty and integrity in their coursework. Students found guilty of academic dishonesty subject themselves to academic sanctions up to and including expulsion from the College.

Academic Dishonesty includes but is not limited to the following:

- Unauthorized copying, sharing or collaboration on assignments
- The use of unauthorized technology, notes, slips, copying or other illegal means to give or receive answers during examinations or on assignments
- Self-plagiarism: Using an assignment for more than one class, without the permission of the instructor
- Plagiarism: The use of ideas or words of another person without proper citations, written or in presentations. A student should consult his/her faculty when questions arise as to when and how to properly acknowledge the work of others within his/her own oral or written expression
- Contract Cheating: Purchasing assignments or hiring an individual to complete coursework. The College expects that every assignment, such as essays, research papers, lab reports, oral presentations, and examinations, be the product of the student whose name appears on the work
- Fraudulent Course Participation: It is dishonest to share your user login to any class and allow anyone other than yourself to take part in any aspect of your academic coursework for pay, or just for assistance

If a student is found to have violated the Fisher College Academic Integrity Policy, penalties ranging from a zero on the assignment through dismissal from the College will be imposed based on the nature of the violation. The full policy can be found on the Fisher College Web Site and Code of Conduct.

Student Code of Conduct & Online Etiquette

All students of Fisher College are expected to abide by the Student Code of Conduct, as published in the Student Code of Conduct and the Fisher College website. Please review this important information. In addition, students are expected to abide the following:

In the online course environment:

- ✓ Respect others and their opinions.
- ✓ Choose your words carefully. Humor is not easily detected through words alone, and it may be misinterpreted.
- ✓ Do not type in all caps. This is viewed as yelling.
- ✓ Use proper English, grammar, and punctuation. "Texting" lingo and abbreviations are not acceptable.



- ✓ All email communications must be sent using your Fisher College email address. Also, be sure to sign your full name to all email communications.
- ✓ Always spell check.

During Live Online Collaboration:

- ✓ Turn off microphone when not in use.
- ✓ Be mindful of your surroundings and privacy of family members. Only students should be present on camera.
- ✓ Stay focused. Do not multitask with emails, phone calls, papers, etc.
- ✓ If you need to step away from the session, use the "Away" function.
- ✓ Use the "Raise Hand" function to ask a question, and then wait to be called on.
- ✓ Proper Attire is required.

This course syllabus and outline is subject to change. Students are responsible for attending classes and visiting Blackboard to ensure they are up to date on any changes that take place.

Please refer to the Fisher College catalog for additional policies.