

Course Name and Number	MTH-140: Introduction to Statistics	Term	INSERT
Faculty Name	INSERT	Virtual Office Hours	INSERT
Phone Number	INSERT	ODU Email Address	INSERT
Course Type	This is a fully online course completed via PantherLearn . It is asynchronous and so weekly pre-recorded lectures will be provided each week.		

Course Overview

COURSE GOAL STATEMENT

An introduction to the basic concepts and computations used in statistical analysis as well as their application to problems in other disciplines, especially biology, business, education and social sciences. Topics include the description of data graphically and numerically, the collection of data via samples and experiments, and the process of drawing inferences or conclusions from data. The laboratory component of the course emphasizes conceptual understanding, interpretation of statistical quantities, and written/oral communication, and will require the use of mathematical software. Prerequisite: MTH 102 or placement.

INSTRUCTIONAL OBJECTIVES

At the completion of this course, each student will be expected to demonstrate measurable outcomes of course objectives by the following means:

Knowledge

1. Students will recognize and employ the appropriate descriptive statistics for sets of data, including paired data.
2. Students will convert data between graphical, numerical, and analytic representations.
3. Students will relate sample data to population data and consider the inferences of this relationship.
4. Students will employ appropriate tests of inference on data and interpret the results.
5. Students will use correct notation in mathematical situations.

Skills

1. Students will employ handheld technology to model and solve problems.
2. Students will be able to communicate mathematical ideas related to statistics and probability.
3. Students will also be able to solve elementary problems in statistics using formulas, tables and graphs.

Attitudes/Dispositions

1. Students should be able to begin to think of numbers in terms of abstractions such as distributions, probabilities, and other relational qualities, rather than as only concrete quantitative symbols.
2. Students will appreciate the connections among different mathematical concepts as well as those between mathematics and other disciplines.

REQUIRED TEXTBOOKS

You will not need to purchase a textbook for this class. Instead, you will use the OpenStax Open Educational Resource (OER) titled *Introductory Statistics* by Barbara Illowsky and Susan Dean. Here is the link to the textbook:

<https://openstax.org/details/books/introductory-statistics?Book%20details>

GRADE BREAKDOWN

Student grades will be determined in the following way.

Types of Assignments	Number of Each Type	Points for each	Total Percentage	Total Points
Discussions	7	25	17.5%	175
Homework	11	35	38.5%	385
Labs	3	50	15%	150
Quizzes	7	40	28%	280
Meeting	1	10	1%	10
Grand Totals	29		100%	1000

ASSIGNMENT DETAILS

1. Discussions

Assignment Purpose: to think more deeply about the broader context and purpose of statistics.

Instructions: You will be given a prompt to answer each week by starting a new discussion thread. Your original prompt should be answered in at least 100 words by Wednesday night at 11:59 PM. Then, you should reply to one fellow classmates' post in at least 50 words by Sunday at 11:59 PM. Also – you are free to respond to more than just one posting if you wish.

2. Chapter Homework

Assignment Purpose: to assess your understanding of the weekly concepts and to practice problems before taking the weekly quiz.

Instructions: Some homework will be submitted through a quiz and others will be submitted through a Dropbox. Please pay careful attention to the submission requirements of each problem set on PantherLearn.

3. Stats Lab

Assignment Purpose: to assess your ability to apply the weekly concepts to real-world problems.

Instructions: Labs will be submitted through a PantherLearn Dropbox. You will complete the lab on your own paper, take a photo (or scan) your papers, and submit them to the Dropbox.

4. Quizzes

Assignment Purpose: to assess your understanding of the weekly concepts.

Instructions: There will be a multiple-choice quiz every week. Quizzes will cover material from the preceding week. Quizzes will be due at 11:59 pm each Sunday. Late quizzes will not be accepted.

5. Meeting with your Professor

Assignment Purpose: to deepen your understanding of statistics.

Instructions: Sometime during the course, you will be expected to have a conversation with your professor about class material. You could use this time to prepare for an assignment or review the feedback you received on an assignment. Please see PantherLearn for scheduling.

COURSE SCHEDULE

	Required Readings	Assignments Due
Week One: Sampling and Descriptive Statistics		
Date to date	Read: Sections 1.1-1.4 and 2.1-2.7 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 1 Discussion (Weds and Sun) • Homework Chapter 1 and 2 (Sun) • Stats Lab Chapter 2 (Data Mon, Final Sun) • Quiz 1 (Sun)
Week Two: Probability and Discrete Random Variables		
Date to date	Read: Sections 3.1-3.2 and 4.1-4.2 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 2 Discussion (Weds and Sun) • Homework Chapters 3 and 4 (Sun) • Quiz 2 (Sun)
Week Three: Continuous Random Variables		
Date to date	Read: Sections 5.1-5.2 and 6.1-6.2 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 3 Discussion (Weds and Sun) • Homework Chapter 6 (Sun) • Quiz 3 (Sun)
Week Four: The Central Limit Theorem		
Date to date	Read: Sections 7.1 and 7.3 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 4 Discussion (Weds and Sun) • Homework Chapter 7 (Sun) • Stats Lab Chapter 7 (Sun) • Quiz 4 (Sun)
Week Five: Confidence Intervals		
Date to date	Read: Sections 8.1-8.3 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 5 Discussion (Weds and Sun) • Homework Chapter 8 (Sun) • Stats Lab Chapter 8 (Sun) • Quiz 5 (Sun)
Week Six: Hypothesis Testing with One Sample		
Date to date	Read: Sections 9.1-9.5 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 6 Discussion (Weds and Sun) • Homework Chapter 9 – Part 1 (Sun)
Week Seven: One- and Two-sample Testing		
Date to date	Read: Sections 10.1-10.4	<ul style="list-style-type: none"> • Homework Chapter 9 – Part 2 (Sun) • Homework Chapter 10 (Sun) • Quiz 6 (Sun)
Week Eight: Topic		
Date to date	Read: Sections 12.1-12.3 Watch videos on PantherLearn	<ul style="list-style-type: none"> • Week 8 Discussion (Weds and Sun) • Homework Chapter 12 (Sun) • Quiz 7 (Sun)

Instructor Information

INSTRUCTOR POLICIES [\[Update this policy to meet your course needs.\]](#)

- You and I will exchange emails using only our ODU email addresses; check your inbox as many times as possible during the day, but at least **twice**. Email and PantherLearn News Items count as *official* instructor communication. Email is the absolute best way to contact me with any questions, comments, or concerns.
- You may also contact me via phone call and/or text message at the following mobile number:

- You are required to complete all assignments by the dates indicated in the syllabus. Submit all assignments, unless otherwise instructed, through PantherLearn. Unless I indicate otherwise, all assignments are due by 11:59 pm on the indicated due date shown in the Course Schedule.
- I will let you know of any changes as far in advance as possible.

DEADLINES, LATE, AND MAKE-UP WORK POLICY [Update this policy to meet your course needs.]

- All assignments are open and available for submission well in advance of the due date, and so I rarely accept late assignments.
- I understand, however, that sometimes life happens so **I will accept late assignments with a 5-point deduction for each day late. All assignments must be submitted at the end of the term with ample time for me to grade them. I will let you know the last day of the term I will accept late assignments.**

ASSESSMENT FEEDBACK [Update this policy to meet your course needs.]

I will post grades in the PantherLearn gradebook for all assignments within **96 hours** of the due date, or of the date received if later, with my comments as appropriate.

RUBRICS [Delete if rubrics are not used in your course.]

Assignments will be scored according to grading rubrics. A grading rubric is a list of specific and measurable criteria for evaluating course work. View grading rubrics prior to beginning work on an assignment to help guide your successful completion of the task. View rubrics a second time once a grade has been posted in order to see instructor feedback.

ACADEMIC INTEGRITY [Update this policy to meet your course needs.]

Plagiarism is not tolerated in this course. **All plagiarized work will receive a score of zero, and I will complete the Academic Disciplinary Form to submit to the Office of Academic Affairs.** The Library has an excellent website discussing all aspects of academic integrity at ODU, which I strongly encourage you to read [here](#).

ODU Online Student Policies

ACCELERATED FORMAT

You are enrolled in an Accelerated format class at Ohio Dominican University. Taking an Accelerated format class means that you will be achieving the same learning outcomes as a full-term semester in only **8 weeks**. It is essential for students to be organized and stay on top of their work in an Accelerated format class. The time frame in an Accelerated format class is compressed, **but the standards and expectations remain the same as a full-term class.**

TECHNOLOGY SKILLS AND EQUIPMENT

Online students are expected to possess a basic understanding of how to use and navigate a computer. To be a successful online student, you should be able to:

- Download, install, launch, and quit applications such as Microsoft Word or a web browser.
- Create, edit, and save files using word processing, spreadsheet, or presentation software applications.
- Configure and use an email client to retrieve, view, create, and send email messages including messages with attachments.
- Operate a web browser, including navigating web pages, clearing a browser's cache and installing or disabling plugins.
- Update your computer operating system and computer software applications.
- Access and change computer operating system settings and computer software application preferences, options, settings.
- Use a webcam and microphone to record video presentations.

STUDENT PARTICIPATION AND ATTENDANCE

- *Time*: the expectation is that you log in and spend 7-9 hours working on this course each week, including watching videos, reading course materials, and completing assignments. The time you spend on the course will vary depending on how you prefer to experience the course, for example, in one or two sittings or over several different sittings.
- *Before Class Starts*: you should have access to the course before the first day of class. Spend that time reading the syllabus, reviewing all items in the Start Here module, reading any assignment details provided, and making a plan for when you will get the work done.
- *No Shows*: students will be reported to the Registrar as a “no show” if they have not participated in the course during the first full week of classes. Participation includes completing any graded or non-graded assignments, such as an Introduce Yourself discussion post. When the student is reported as a “no show,” the Registrar’s office will then delete the student from the class.
- *Attendance*: while there is no official attendance policy in online courses, please do not take a vacation without Internet access or put the class on hold because life becomes too hectic, thinking you can make up all the work at the end of the term. The course is designed to pace your learning, allowing you to gradually build skills which will help you succeed. If you experience, or anticipate you will experience, an absence from the course due to technical or medical reasons, please contact me directly so we can discuss your options.

DROPPING THE COURSE

University policies will be followed; indicating to your instructor a desire to drop the course does not mean the course has been dropped. Consult your academic advisor, or the academic calendar, for exact dates for formally dropping a course without penalty.

ONLINE STUDENT CONDUCT AND (N)ETIQUETTE

Taking an online course and corresponding via the Internet presents communicators with a challenging task. It is important to remember several points of etiquette that will smooth communication between us.

- Read first, write later. It is important to read all posts or comments of students and myself within the course discussion before personally commenting to prevent repeating commentary or asking questions that have already been answered.
- Avoid language that may come across as strong or offensive. Language can be easily misinterpreted in written communication. Review your written communication to make sure that outsiders reading it would not be offended, then post the statement. Humor and sarcasm may easily be misinterpreted as well, so try to be as matter of fact and professional as possible.
- Follow the language rules of the Internet. Do not write using all capital letters because it will appear as shouting. Avoid the use of “texting” jargon and abbreviations as they can be misinterpreted. The use of emoticons, however, is appropriate and in fact can be helpful when used to convey nonverbal feelings ;)
- Consider the privacy of others. Ask permission prior to giving out a classmate's email address or other information.
- No inappropriate material. Do not forward virus warnings, chain letters, jokes, etc., to classmates or instructors. The sharing of pornographic material is forbidden.

REQUIRED STYLE

Ohio Dominican University has adopted as its style guide the *MLA Handbook for Writers of Research Papers (MLA)* for general studies courses in the undergraduate programs. In this course, it is expected that all references, citations, and formats for submitted work must follow MLA format.

WRITTEN ASSIGNMENT GRADING CRITERIA [Update this policy to meet your course needs.]

All written work should be presented in a professional style and follow the basic principles of effective written communication.

- Adherence to MLA standards, including double-spaced; 1-inch margins; 12 pt. font.

- Free from grammatical and typographical errors.
- Demonstrates college-level critical thinking, reflection, and analysis skills.
- Demonstrates the ability to develop independent thought and original ideas; do not simply paraphrase readings or other sources. All college-level work requires deep analysis of information, application of information, and synthesis of original concepts or solutions.
- All written work submitted will be graded on both composition and content.

All written assignments must be submitted through PantherLearn **where your assignments may be checked for originality by Turnitin.**

GRADING SCALE

I will record student proficiency in this course using the following letter grades:

%	Pts.	%	Pts.
A 95-100	950 – 1000	C 74-76.9	740 – 869
A- 90-94.9	900 – 949	C- 70-73.9	700 – 739
B+ 87-89.9	870 – 899	D+ 67-69.9	670 – 699
B 84-86.9	840 – 869	D 64-66.9	640 – 669
B- 80-83.9	800 – 839	D- 60-63.9	600 – 639
C+ 77-79.9	770 – 799	F ≤ 59.9	≤ 599

ODU Services / Resources

ODU HELPDESK

Students are responsible for assuring any computer used for ODU courses is capable of uploading content to drop boxes. If you are experiencing any technological difficulties with your computer, PantherLearn, Email, or any other ODU system, the ODU Helpdesk is available to assist you. The Helpdesk is located on the second floor of Spangler Learning Center and can be reached at (614) 253-3633 or helpdesk@ohiodominican.edu. The FAQ page is found [here](#).

ADA (AMERICANS WITH DISABILITIES ACT)

Students with a documented disability who wish to request reasonable accommodations should contact the Accessibility Services Office and then meet with their instructors. Accommodation arrangements should be made during the first two weeks of the semester. Students may request accommodations at any time during the semester, but please note that **accommodations are not retroactive**. Students must contact the Accessibility Services Office **prior to every semester that accommodations are needed**. The Accessibility Services Office is located on the second floor of Spangler Learning Center, room 227. Contact the Accessibility Office by phone at (614) 251-4511 or by email at accessibility@ohiodominican.edu. To make an appointment, in-person or online, use [Accessibility Bookings](#).

LIBRARY SERVICES

The ODU Library is located in the Spangler Learning Center. If you need (e)books, articles, or other materials, you may need to access library resources. Library services are available to help you manage your library account, help find and access the items you need, and assist you with learning how to navigate through the resources. If you need to do any research, start as soon as possible. You may need time to obtain a full-text resource, and you may need time to ask a librarian for help. To use the library’s databases and other resources for this course, go [here](#) and choose your database(s) alphabetically or by subject. If you have a question for a librarian, further assistance is available [here](#) or by calling (614) 251-4754.

ACADEMIC RESOURCE CENTER (TUTORING)

Located in the Spangler Learning Center, the Academic Resource Center (ARC) helps students succeed and excel in their studies by providing assistance in writing, course-specific content, test preparation, and general study skills. To find out more, visit the [ARC website](#). Email the ARC at tutoring@ohiodominican.edu.

ACADEMIC COACHING / LEARNING STRATEGY

Academic Coaches help students develop effective learning strategies for success in unfamiliar courses, including time management, tips for reading large amounts of text, taking better notes, organizing material, and predicting test questions. Coaches are available online or in-person (Spangler 207). Click here to [Find a Coach](#).

SUBJECT-SPECIFIC TUTORING

Peer tutors, recommended by faculty, know how to approach challenging academic subjects. They provide course-specific, in-depth tutorial assistance to individuals and groups, online or in person (Spangler 207). Click here to [Make an appointment](#)

WRITING CENTER

Assistance with writing is available free of charge for this course through the Academic Resource Center at the Write Place (Spangler 206), where specialists are available to assist you at any stage of the writing process, online or in-person.

You may visit on a drop-in basis whenever the Write Place is open or make an appointment for a personal, face-to-face tutoring session by emailing writeplace@ohiodominican.edu, using the [online appointment system](#), or calling 614.251.6673.

RETENTION ALERT

Ohio Dominican University utilizes Retention Alert, an early alert system, in an effort to help students receive the resources and support they need to be successful. Should I become concerned about your academic performance and/or overall wellbeing, it is likely that I will refer you to a member of Ohio Dominican University's Student Success Team. The early alert system can provide you with additional services and support. Please know that both Ohio Dominican University and all its faculty members, including myself are committed to doing everything we can to help you be successful in your academic studies.

COUNSELING SERVICES

Counseling Services is located in the Griffin Student Center, room 235. If you are experiencing personal problems, stress, study or time management difficulties, or mental health related concerns that you feel may adversely impact your ability to be a successful student at ODU, please contact the Counseling Services Office by phone at (614) 251-4570 or through email at counselingservices@ohiodominican.edu to set up a free and confidential appointment.

HEALTH SERVICES

Health Services is also located in the Griffin Student Center, room 235. Health Services are open to all students requiring primary care, assessment, evaluation, and treatment options. There is no cost for services, supplies, cold care kits, or over-the-counter medications. A Physician Assistant is available Monday through Thursday, 10 am – 1:30 pm **by appointment**. Services include Athletic physicals, allergy injections, TB screening and testing for Group A Streptococcus, Infectious Mononucleosis, Blood Sugar, and consultation and referral to health care providers in the community as indicated. Contact the Health Services Office by phone at (614) 251-4570 or through email at wellnesscenter@ohiodominican.edu to schedule a free and confidential appointment.

CAREER DEVELOPMENT CENTER

The Career Development Center (CDC) is a critical resource on campus to support your success at ODU and after graduation. The CDC assists with every phase in the career development process: self-exploration, major & career

MTH-140 OL Course Syllabus



exploration, internship and job searching, resume + cover letter writing, and interviewing. Contact our office in Erskine 108 via phone at (614) 251-4733 or email careercenter@ohiodominican.edu. Visit our website [here](#) for more information.

Activate your account in **Handshake** [here](#), our online career community, to make an appointment with a career coach and to access amazing job and internship opportunities.

UNDERGRADUATE ORIENTATION AND PANTHERLEARN TRAINING

If this is your first online course, you must complete the [Student PantherLearn Training](#) course and visit the Undergraduate Orientation course before beginning your classwork. You will find the courses in the “Select a course...” dropdown list at the top of your PantherLearn Home Page. If you do not see the courses, then email the Helpdesk at helpdesk@ohiodominican.edu.