# Statistical Methods MAT 220 ONLINE SYLLABUS Fall Split B 2019

## **COURSE INFORMATION**

# **Professor:**

Randy Heaton

## Office:

Tate 14

#### Office Hours:

Anytime by appointment (by phone or video chat)

#### **Contact Information:**

rheaton@wesleyancollege.edu

#### **Class Location and Time:**

Online, once weekly live chat times to be announced at the end of Week 1

## Text/ISBN:

Elementary Statistics: A Step-by-Step Approach, Allan Bluman, ISBN-10: 0078136334

# **POLICIES and PROCEDURES**

#### Goals

Students will learn the how to design an experiment and interpret quantitative data derived from it.

#### Content

Students will study normal distributions, measures of central tendency, tests of hypotheses, chi-square tests, tests for homogeneity and independence, confidence intervals, regression, and correlation.

# Requirements

Students are required to participate in weekly live meetings and weekly discussion forums as well as complete homework assignments and four unit tests.

# **Prerequisites**

MAT 126, 130, 140, 192, or equivalent placement.

## **Participation and Grading**

Online courses offer great flexibility for students who have busy schedules. Please keep in mind, though, that "online" does not equal easy! The most effective online courses are not self-paced independent studies but highly interactive, collaborative learning

R. Heaton/Syllabus: page 1

environments where we can hold in-depth conversations, ask hard questions, and share our work in progress—just as we would if were meeting face-to-face. Being successful in an online course at Wesleyan requires careful time management, attention to detail, a willingness to ask for help when you need it, and the ability to read detailed instructions and work independently.

Because we will not be meeting together in a traditional classroom, you will be responsible for participating and demonstrating your understanding of course material in different ways: through our weekly live chat sessions, discussion forums, and online assignments. To ensure that you are participating fully and successfully in this course, please adhere to the following guidelines:

- ✓ You should join each discussion forum and live chat activity on time and prepared to participate fully in class discussions and collaborative activities. Always have on hand your textbook, notebooks, pens/pencils, and any other materials requested by your professor. Frequent tardiness, absences, low participation, and/or unpreparedness may result in a lower course grade.
- ✓ Your professor will offer at least one real-time meeting in our virtual classroom each week. These live chat sessions are a vital opportunity for you to ask questions, ensure you are on track with your work, and collaborate with your classmates and professor—just as you would in a face-to-face classroom. Weekly live chat attendance is flexible, but missing a live chat session is the same as missing class time. Please be aware you are responsible for all information, instructions, and discussion points covered during the sessions regardless of whether you attended. You should aim to attend a minimum of four live chats over the course of the term, but attending more often will boost your overall performance in this course. If for some reason you cannot attend a weekly live chat session, you should plan to review the recording and complete a Live Chat Exit Ticket by the end of the week. You can find the Live Chat exit ticket on our course site under the "Study Materials" button. A live chat scheduling poll and further instructions will be provided during Week 1.
- ✓ You should initiate communication with your professor when help or extensions are needed and resolve any technical issues as soon as possible.
- ✓ You should check your Wesleyan e-mail daily and respond to your professor's e-mail requests within 24 hours (sooner would be better).
- ✓ Every week you will have reading and assignments to complete. As a rule of thumb, you should expect to spend 6–7 hours each week participating in forum discussions, attending (or reviewing the recordings of) live chat sessions, studying independently, and completing homework. Be sure to plan your weekly schedule carefully to ensure you have adequate time to complete course activities and assignments thoroughly and on time.
- ✓ Meeting scheduled deadlines is essential. You are expected to submit assignments in a timely and regular fashion without reminders from your professor. Oftentimes, other students will be depending on you to submit your work on time so that they may finish their own work. Don't wait until the last minute to begin the week's work because computer problems, last minute emergencies, and sudden outages DO happen!

Your grade in this course will be determined by your performance in the following categories:

Assignments	Percentage
Discussion Forum Participation	10%
Live Chat Participation	10%
Homeworks	30%

Project Design	10%
Test 1	10%
Test 2	10%
Test 3	10%
Test 4	10%
TOTAL:	100%

The grading scale in the class will be as follows:

A=90-100%

B=80-89%

C=70-79%

D=60-69%

F=59% and below

You may track your running point total throughout the term via our Canvas course site. Please be aware, however, that the course grade you see in Canvas will reflect only the assignments and activities you have already completed. You will have several major assignments due near the end of the term. Your performance on these assignments will have a significant impact on your final course grade, so be sure to set aside plenty of time to complete them to the best of your ability.

#### **Academic Integrity**

The Honor Code is the foundation upon which life in the Wesleyan College community is built. Academic violations of the Honor Code include, but are not limited to: cheating, plagiarism, unauthorized collaboration, inventing or falsifying information, turning in work for more than one class without authorization, or helping someone else violate the Honor Code. Students must self-report academic violations of the Honor Code to the faculty member teaching the class. If a student knows of an academic violation of the Honor Code by another student, she must report that violation to the faculty member if the student does not self-report.

In this class, violations of the Honor Code will, minimally, result in a zero on the assignment in question. Students who commit egregious or repeat violations will automatically fail the course. All academic violations of the Honor Code will also be reported to the Provost, who may impose additional penalties for repeat offenders, and Honor Council, who may impose additional social penalties. For more information on how the Honor Code works, including the appeals process, refer to *The Wesleyanne: Student Handbook*.

#### **Absence Policy**

The following is taken from the Wesleyan Catalogue regarding absences:

Students are expected to be regular and punctual in attending classes, laboratories, private lessons, and college convocations. A student who is absent from any class may be penalized by the lowering of her grade in the course. The semester ends with the last day of the final exam week. Students are responsible for all absences from class, and it is the responsibility of the student to contact the professor about the possibility of making up work missed for any absence including field trips and athletic events authorized by the college. Students pursuing regular courses in art, music, and theatre are required to attend and take part in programs, plays, or exhibitions scheduled by the faculty of the respective areas. (29)

R. Heaton/Syllabus: page 3

Because reading and writing skills develop slowly over time and with practice, regular participation is essential in this course. Any time students do not participate fully in discussion forum and live chat activities, their grades could suffer due to missed instruction, group assignments, and collaborative activities.

For these reasons, students are permitted no more than three unexcused forum or live chat absences. Beyond that, students may see a 5% deduction in their overall grade for each additional absence. Students should make every effort to inform the professor in advance whenever they will be absent due to illness, an emergency, or other extenuating circumstances. Doing so will drastically increase the likelihood of their being excused from class and able to make up missed assignments.

## Late Work, Make Up, and Extensions

<u>Late Work and Missed Deadlines</u>: Deadlines in this course are firm. If you will be submitting work even a few hours late, e-mail your professor and any students (group project members, for example) who might be affected by your late submission. You should expect to receive a point deduction for any work submitted after a deadline has passed.

- O Classwork, workshops, forum activities, and quizzes may not be made up. Students are expected to be prepared to work and participate fully and on time in scheduled activities.
- O Exercises may be turned in up to 24 hours late for ½ credit.
- O Unit Exams may be made up within 48 hours with a 25% deduction only when a student secures written permission from the professor. The opportunity to make up a unit exam is not guaranteed but will be offered only at the professor's discretion. Be aware that make-up exams may be significantly different from the original in both format and content.
- O Major writing assignments (i.e., research projects, essays, and papers) may be submitted up to 48 hours late but will receive a point deduction according to the following guidelines: within 12 hours of the deadline = 10% deduction; within 24 hours of the deadline = 20% deduction; within 48 hours of the deadline = 30% deduction; and more than 48 hours beyond the deadline = a grade of zero.

## Extensions:

In general, 24 hours is a reasonable amount of time to request for an extension. However, do not wait until the last minute to make the request. Late work will be accepted without incurring a point deduction only with prior permission from your professor. To request an extension on an assignment, use the following Grace Pass. Copy the text below into an e-mail to your professor and submit it at least 24 hours before the due date/time of the assignment. Remember to include a reasonable explanation for your request. You have two Grace Passes to use during the term; use them wisely.

	Grace Pass	
Please grant me a 24-hour extension for the completion of (name assignment)  I agree to submit this assignment by (name date and time)		
Signed:	Date:	

## Planned Absences:

Contact your professor a week before departure for any planned absence and arrange to submit work early or establish make-up work deadlines for when you return.

#### **Emergency and Extenuating Circumstances:**

When a family crisis, injury, illness, or any other extenuating circumstance occurs, your professor will certainly understand and will do the utmost to assist you with a modified assignment plan. Contact your professor as soon as possible to make arrangements for your work.

## **Dropping and Adding Course(s)**

Students should exercise great caution in making changes to their course load during the drop/take period in any term, as changes to course schedules may affect both tuition charges and financial aid. Consultation with the Financial Aid Office staff is strongly advisable before making any adjustment to a course schedule. After the drop/take period in any term, no adjustment of tuition will be made, although adjustments to financial aid may be made (*Wesleyan Catalogue* 220).

#### Statement on Disabilities

Wesleyan College is committed to equal education, full participation and access to facilities for all students. Any student who requires reasonable academic accommodations, use of auxiliary aids or facility access for a class must first register with Disability Resources by contacting Jill Amos, Director of Disability and Advocacy Services, <a href="mailto:jamos@wesleyancollege.edu">jamos@wesleyancollege.edu</a> or (478) 757-3800. If reasonable accommodations are established, students should request Accommodation Letters from Disability Resources then schedule an appointment to meet with the professor to determine how the accommodations will be implemented for each class as early in the semester as possible. Accommodations require advance notice to implement and will not be retroactively administered for the semester. Accommodations that decrease the integrity of a course will not be approved.

#### Virtual Classroom & Forum Behavior

#### Civility in the Academic Community:

Students, faculty, and staff are expected to treat one another with respect in all interactions. In the classroom, rude, disruptive and/or disrespectful behaviors as determined by a faculty member interfere with other students' rights and with the professor's ability to teach. Therefore, any student exhibiting unacceptable behaviors during a class will be asked to leave and will be counted absent for that class period. Failure to cooperate with this process will result in disciplinary action that may include withdrawal from the class or dismissal from the College. Violations will be reported to the Provost.

# Privacy in the Classroom:

In order to promote an environment in which ideas may be freely expressed, the interior office and virtual or in-person classroom spaces at Wesleyan are private spaces. The unauthorized creation of photographic images, audio, or video recordings of students or faculty in these spaces is considered to be disruptive behavior which may result in a student's removal from class according to the professor's discretion. The distribution of any such recordings of students or faculty without the express written permission of the College is strictly prohibited and is subject to disciplinary action by the Provost of the College.

# Personal Electronic Devices:

Electronic devices (such as televisions, cell phones, tablets, and iPods) may <u>not</u> be used during live chat time, group work, or individual appointments. All devices must be turned off (or in silent mode) and stowed out of sight. Remember to stay with your professor in the virtual classroom at all times (no toggling between Internet windows!) unless instructed to do otherwise.

R. Heaton/Syllabus: page 5

# **Trigger Warning**

In literary, scholarly, and professional writing, authors often depend upon elements of surprise or shock to communicate their ideas and evoke responses from readers. To provide specific "trigger warnings" ahead of each piece that might potentially be offensive is to drain these writers and works of their power. To that end, please consider this statement your "trigger warning": We will encounter works in this class that challenge our expectations, move us out of our comfort zones, and yes, potentially upset us. Working through our responses to consider (a) why writers might have wanted to challenge readers and (b) the techniques by which writers achieve their aims is a critical part of both literary analysis and your overall education at Wesleyan. Please visit with me during office hours if you have any questions about this policy.

# Potential Changes to Course Syllabus and/or Course Schedule

The following class schedule is a general plan for the course. You will find more detailed instructions for each week's activities and assignments on our Canvas course site. Deviations may be necessary, depending on students' learning needs, and will be announced in advance via announcement and/or e-mail. Students should check their course site announcements and Wesleyan e-mail accounts at least once every twenty-four hours during the term to watch for updates regarding this class. Students should also respond to all e-mails from the professor within twenty-four hours.

#### **CLASS SCHEDULE**

Our typical online week will run Friday through Thursday to allow you the weekends for independent reading and studying as you choose. Each Friday morning, you will find all of the upcoming week's course work posted on our course site. Make it a habit to take some time on Fridays to log in to our course site and look over your next set of readings, assignments, and deadlines so you may plan your study time accordingly. Please note our first "week" is a short one.

Week 1: Types of data and how to represent them

Week 2: Measures of center, variation, and position

Test 1

Week 3: Probability and the normal distribution

Week 4: Hypothesis testing and the z-test

Test 2

Week 5: t-tests

Week 6: chi-squared tests and ANOVA

Test 3

Week 7: Correlation and regression

Week 8: Confidence intervals

Test 4