## Marshall University Syllabus

Course Title/Number	STA 225 – Introductory Statistics Section:210 CRN: 5795
Semester/Year	Spring 2018
Days/Time	Online
Location	Web
Instructor	Laura L. Stapleton
Office	Smith Hall 720
Phone	304-696-4334
E-Mail	stapleto@marshall.edu
Office/Hours	By appointment
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to <u>www.marshall.edu/academic-affairs</u> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to <u>http://www.marshall.edu/academic-affairs/?page_id=802</u>
	Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment
Disability Policy	Marshall University is committed to equal opportunity education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disability Services (ODS) in Prichard Hall 117 (304.696.2467) to provide documentation of their disability. Following this, the ODS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experience, outside assignment, testing, and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, access the website for the Office of Disabled Student Services: http://www.marshall.edu/disabled.

#### **Course Description: From Catalog**

A critical thinking course in applied statistical reasoning covering basic probability, descriptive statistics and fundamental statistical inference procedures. Parameter estimation and hypothesis testing for variety of situations with wide applications.

**Prerequisites:** PR: ACT Math 21, or SAT Mathematics Before Mar. 16 500, or SAT MATH SECTION SCORE 530, or Placement Math After SP17 102, or MTH121 Minimum Grade C, or MTH123 Minimum Grade C, or MTH127 Minimum Grade C, or MTH130E Minimum Grade C, or MTH122 Minimum Grade C, or MTH130 Minimum Grade C, or MTH125 Minimum Grade C, or MTH121B Minimum Grade C

The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this Course	How student achievement of each outcome will be assessed in this Course
Students will select and produce appropriate graphical, tabular, and numerical summaries of the distributions of variables in a data set. Summarize such information into verbal descriptions.	Discussion forum, homework, assignments/projects	Homework assignments, exams and project.
Students will summarize relationships in bivariate data using graphical, tabular, and numerical methods including scatter plots, correlation coefficients, and least squares regression lines.	Discussion forum, homework, assignments/projects	Homework assignments, and exams.
Students will construct a model for a random phenomenon using outcomes, events, and the assignment of probabilities. Use the addition rule for disjoint events and the multiplication rule for independent events.	Homework assignments/projects	Homework assignments, and exams.
Students will be able to recognize the difference between discrete and continuous random variables and probability distribution. Especially use the normal distribution to interpret z- scores and compute probabilities	Discussion forum, homework assignments/projects	Homework assignments, and exams.
Students will estimate a population mean, a population proportion or difference between means and difference between proportions using point estimates and confidence intervals and interpret the confidence level and margin of error. Understand the dependence of margin of error on sample size and confidence level.	Homework assignments	Homework assignments, exams, activities, and projects.
Given research questions involving a single population or two populations, student will be able to formulate null and alternative hypotheses. Describe the logic and framework of the	Homework assignments	Homework assignments, exams, activities, and projects.

inference of hypothesis testing. Make decisions using classical and p-value approaches and draw appropriate	
conclusions. Interpret statistical and	
practical significance in this setting.	

#### **Required Texts, Additional Reading, and Other Materials**

Title	le : Elementary Statistics: A step by step approach (A Brief Version), 7 <sup>th</sup> edition.		
Author	: Allen G. Bluman		
ISBN	: 978-0-07-772058-2		
Publisher	: McGraw-Hill, New York, NY.		
Connect Mat Access to the Access to Exc			
Calculator: You will need a calculator. It is recommended that you use a TI-83/TI-83 plus or similar graphing calculator. You may use the calculator on all work and assignments in this class.			
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## **Course Requirements / Assessments**

- 1. Exam #1 week of 1/29/18
- 2. Exam #2 week of 2/19/18
- 3. Exam #3 week of 3/26/18
- 4. Final Exam- week of 4/30/18

See the Course Schedule for more information.

# **Grading Policy**

A student's grade is assessed by the following percentages earned from each of the categories below:

Category	% of Grade	
Exams (3 @ 15% each)	45%	
Homework	20%	
Discussion Board	10%	
Assignments/Projects	10%	
Comprehensive Final	15%	
Total	100%	

The Mathematics Department uses the following grade scale for its classes:

90.00 - 100	=	А
80.00 - 89.99	=	В
70.00 – 79.99	=	С
60.00 - 69.99	=	D
Below 60.00	=	F

 Due Dates: The course schedule identifies sections that must be completed. In Blackboard, each week a folder will open up that outlines the activities that are due for the week. These can include Connect Math and Blackboard activities. All homework and assignments for the week are due on Sunday at 11:59pm, with the exception of the final exam which is due on Friday, May 4<sup>th</sup>, the last day of Finals Week.

Any Blackboard homework or Connect Math homework that is completed within one week after the due dates can still be submitted but will receive an automatic 20% deduction from the homework grade. After the one week has passed, the assignment is worth 0 points.

**For example, 1/18/18 Homework:** Homework assigned during the week of 1/8/18 will have a deadline of Sunday 1/14/18 at 11:59pm. If you miss the 1/14/18 due date, you can still turn in the assignment by 1/21/18 but will automatically receive a 20% deduction. Any assignments turned in after 1/21/18, they will be worth 0 points.

**Tests must be accomplished during the week assigned.** Students must notify the instructor by phone or e-mail prior to the deadline of an exam if they cannot take a scheduled exam. Only excused absences will warrant make up exams (illness with physician's excuse, approved university sport or activity absence, death in the family, etc.) If excused, the student will have three days to take the exam with no penalty. To obtain an excused absence, please email the instructor, if the excuse is under three days. If over three days, then documentation must be submitted to the Dean of Student Affairs office (Memorial Student Center 2W38). Students who do not have a university excused absence and miss an exam will receive a grade of 0.

#### **Attendance Policy**

There is absolutely no requirement that you come to campus. You can communicate with me via the course Mail tool in Blackboard. All exams are timed and taken online.

**HOMEWORK:** Homework can be found in Connect Math. To the right of each question, you will find some very useful tools that will provide immediate feedback to you, such as **Check Answer, Solve It** or **Guided Solution**. Another helpful feature is the **Ask My Instructor** option. This will allow you to send me an email about a specific question.

All of the homework can be taken an **unlimited** number of times so that you feel comfortable with the material before the exam with the highest score being used to determine your grade. When you take a homework assignment over, you only need to do the problems you got incorrect.

To receive maximum credit, all homework assignments should be completed by Sunday at 11:59pm. However, you can submit any Connect Math homework assignment for one week past the deadline, but you will receive an automatic 20% deduction of your grade for that assignment. After the one week, the assignment cannot be submitted for a grade.

Instructional Videos: I have included Optional Videos which may help you with the material. These are optional and are not worth any points. You may use them to help you gain understanding of the material and learn how to solve problems. They videos are open throughout the duration of the course.

ASSESSMENT POLICIES: All exams and the Final can be found in Connect Math.

• For each exam, you'll find a Practice exam. These are optional and are not counted for a grade and are only for your benefit to determine if you are ready for the exam. You do not have to complete the practice exams. I have created them to mimic the exams, meaning they have approximately the same number of questions and conditions of the exams. What do I mean by "conditions"? When you take an exam or the final, you will not have access to any tools (Check Answer, Solve It and Guided Solution) that were present in the Homework. If you find that you cannot do the problems without the tools, then you are not ready for the exam! If you take the practice exam, make sure that you take it a few days before the deadline so that you can reflect on what you missed and practice those problems again. I have given you unlimited on each Practice Exam. When you do a retake on a Practice Exam, you will only need to redo the problems you got incorrect.

- All assessments (all exams and the Final) are **open book/open notes**. Note: If you have purchased the Connect Math license with eBook, then the ebook icon will be available during the exams and the Final.
- All assessments (all exams and the Final) are timed. When the timer runs out, the assessment will close. So, please pay attention to the time.
- All exams have approximately twenty-five questions worth 4 pts. each. You will have **one** attempt and 5 hours for each. (I don't think it you will need this length of time, but I wanted to give you plenty of time.)
- The Final Exam will be comprehensive. It will cover Chapters 3 8, and 10. You will have one attempt and 5 hours to it. (Again, I don't think it will take you this long, but wanted you to have plenty of time.) The Final Exam is due on the last day of Final Exam week on Friday May 4<sup>th</sup> at 11:59pm, which is a different day from previous exams.
- If you are taking an exam or final on the day of a deadline, make sure you start the exam/final with enough time to finish before the deadline at 11:59pm. It is your responsibility to finish the exam BEFORE the deadline. If the exam closes because you ran out of time, that is not a reason to reopen. So, budget your time appropriately.
- After the due date, you will be able to review your exams by going to the Gradebook and clicking on the score. You will be able to review each question, your response and also a detailed explanation (on the right with the link, View the explanation.) Use this as a learning tool so that you can determine what you did incorrectly in case you see this type of question again on the final.
- Chapter 8 and 10 are new material for the final exam.

# **Tutoring Facilities**

The Department of Mathematics offers a free tutoring lab for Marshall students enrolled in mathematics courses. The tutors can help with all classes from MTH 098 to MTH 231. No appointment is necessary; just stop in and ask for a tutor. The lab location and tutoring hours are:

- Smith Hall 625: Monday through Thursday 10am to 4pm and 5:00pm to 6:30pm. Friday 10am to noon. The lab will open on the second week of classes, beginning August 28 and running through the end of the semester. The lab is not open during finals week.
- The University College Tutoring Center in the Communications Building (second floor Smith Hall) has tutors who are available for free, by appointment. Additional information can be found at <a href="http://www.marshall.edu/wpmu/uc/tutoring-services">http://www.marshall.edu/wpmu/uc/tutoring-services</a>.

<u>Technical Requirements/Support</u>: For minimum hardware/software requirements please see: <u>http://www.marshall.edu/muonline/hardwaresoftwarecheck.asp</u>

- Be sure to run the free web browser tune-up: <u>http://www.marshall.edu/muonline/support/tuneup.asp</u>
- You will need to have several plugins (software) installed on your computer. These
  plugins are all free. You will need Real Player and Flash Player to experience the
  streaming video and audio clips that are part of the course. You can easily check your
  computer to see if you have these programs (and if you don't install them for free), by
  clicking on this link: <u>http://www.marshall.edu/muonline/support/plugin.asp</u>
- If you have technical problems, please go to the Help Desk: <u>http://www.marshall.edu/muonline/technicalfaq.asp</u>

**Technical Support:** Marshall University offers the following technical support for its students who take either traditional or online classes:

# SERVICE DESK HOURS – Located in Drinko Library on the Main MU Campus

Monday - Thursday: 24 Hours Friday: 8:00AM - 6:00PM Saturday & Sunday: On Call Only (Calls received will be returned within 4 hours)

# HELP DESK CONTACT INFO:

(304) 696-3200 Huntington calling area
(304) 746-1969 Charleston calling area
(877) 689-8638 Toll free, outside the Huntington/Charleston calling areas http://www.marshall.edu/inforesources
itservicedesk@marshall.edu

# Need Help with Connect Math?

To contact their customer service department by email, phone, or fax, please use the following contact numbers: (All hours are EST.)

Sunday:	4:00 pm to 1:00 am
Monday – Thu	ursday: 7:00 am to 1:00 am
Friday:	7:00 am to 9:00 pm
Telephone:	949-390-2095
Fax:	949-390-2097
Email:	https://www.connectmath.com/support/form

## **Course Schedule**

\* Blackboard contains a folder for the upcoming week. All of the tasks which must be completed will be listed within that folder.

Note: Chapters 1 and 3 will be covered during the three weeks. By front loading this easier material rather quickly, we will be able to decrease the number of sections that you will have per week when the material gets more challenging.

Week:	Review this folder in Blackboard for assignments. Folder opens @12:01 am. Go to:	Connect Math that will Be Covered during the week. Note: Other Blackboard assignments are listed in the folder.	Due Date for all of the week's material (Both Blackboard and Connect Math). Due @ 11:59pm on:	Late Penalty (20%) for homework and exams completed before this date @ 11:59pm:
1	Week of 1/8/18	1-1 through 1-4	1/14/18	1/21/18
2	Week of 1/15/18	2-1 through 2-4	1/21/18	1/28/18
3	Week of 1/22/18	3-1 through 3-4	1/28/18	2/4/18
4	Week of 1/29/18	<b>Exam 1</b> , 4-1, 4-2	2/4/18	2/11/18
5	Week of 2/5/18	4-3, 4-4, 4-5	2/11/18	2/18/18
6	Week of 2/12/18	5-1, 5-2, 5-3	2/18/18	2/25/18
7	Week of 2/19/18	<b>Exam 2,</b> 6-1, 6-2	2/25/18	3/4/18
8	Week of 2/26/18	6-3, 6-4	3/4/18	3/11/18
9	Week of 3/5/18	7-1, 7-2	3/11/18	3/18/18
10	Week of 3/12/18	7-3, 7-4	3/18/18	3/25/18
11		Spring Br	eak – No Classes	
12	Week of 3/26/18	Exam 3	4/1/18	4/8/18
13	Week of 4/2/18	8-1, 8-2	4/8/18	4/15/18
14	Week of 4/9/18	8-3, 8-4	4/15/18	4/22/18
15	Week of 4/16/18	8-5 <i>,</i> 8-6	4/22/18	4/29/18
16	Week of 4/23/18	10-1, 10-2	4/29/18	5/4/18
Finals	Week of 4/30/18	Final Exam	5/4/18 Friday, not	There is no late
Week			the usual Sunday deadline!	option for the Final.

## **Connect Math**

How do you register for Connect Math?

- Go to our Blackboard course. You can get to Blackboard either through **mymu.marshall.edu** or **muonline.marshall.edu**.
- Click on the **Connect Math** icon **found on the main page**.
- You will see our book and the two boxes below the picture, one containing the word ALEKS and the other containing Connect Math. Click on **the Connect Math.**
- You will now be directed to Connect Math. Click the "Sign up now!" link. (This can be found in the center, towards the lower part of the page, under NEW USER?)
   Enter the same name as is used in the Banner system, even if you have changed your name since you became a student. Either put in the old name or change your Banner Student info to reflect your new name. But, they will need to match in order for me to give you credit for your work and process grades in Banner!



Course: STA 225-210 Spring 2018 - CRN: 5795 Book: Elementary Statistics: A Brief Version, 7<sup>th</sup> Ed., Bluman Instructor: Prof. Stapleton School: Marshall University (modify) » Continue

- Click Continue
- You will next be asked to enter your Access Code. Depending on whether or not you have purchased any course materials will determine which of the three scenarios that you should choose:

Scenario #1: You have already purchased the Connect Math license are ready to register:

Open the license card and enter the 20-digit Connect Math Access Code that came with your license information.
 Fill in the remaining information to complete the registration. \*Note: Enter the name that you use in the Banner system, even if you have changed your name since you became a student. Either put in the old name or change your Banner Student info to reflect your new name. But, they will need to match in order for me to give you credit for your work and process grades in Banner. If asked to provide an email, use your Marshall email.

Scenario #2: You have not purchased the license yet but would like to purchase a Connect Math license from Connect Math (usually a cheaper option for the license).

 Click on the link <u>purchase an access code online</u> (found just above the window where you enter the Connect Math Access Code) and choose the type of license you prefer (ebook or no ebook). Note: you must have either a physical textbook or use the eBook. It is your choice which you prefer.

Fil in the remaining information to complete the registration. \*Note: Enter the name that you use in the Banner system, even if you have changed your name since you became a student. Either put in the old name or change your Banner Student info to reflect your new name. But, they will need to match in order for me to give you credit for your work and process grades in Banner. If asked to provide an email, use your Marshall email.

Scenario #3: You have not purchased any materials yet and are not ready to buy the book or the license.

Connect Math offers students a two week license to begin the course from Day 1. You can use it for any reason (don't have Financial Aid monies, haven't got around to buying your book, etc.) Once the code expires, you will be locked out of Connect Math account until you purchase a regular Student Access Code. To avoid interruptions, please purchase your Student Access Code **BEFORE** the two weeks expire. Note: The two weeks will be deducted from the 52 week license when you purchase it.

• Enter the **2 week Financial Aid Access Code: 8EBA0-7E67D-6BCD4-F785A in the Connect** Math Access Code box. Fill in the remaining information to complete the registration. \*Note: Enter the name that you use in the Banner system, even if you have changed your name since you became a student. Either put in the old name or change your Banner Student info to reflect your new name. But, they will need to match in order for me to give you credit for your work and process grades in Banner. If asked to provide an email, use your Marshall email.

How to purchase or Extend Your License: You can extend your Connect Math account at any time by clicking on "extend your account" and entering a purchased Student Access Code. If your temporary access expires before you purchase a Student Access Code, simply log in to Connect Math and you will be directed on how to extend your current account. You will then be able to continue your course where you left off before the temporary access expired. You do NOT need to create a new Connect Math account to continue your course.

How to Log IN TO CONNECT MATH: To log in to Connect Math:

- a) Go to our course in BlackBoard and click on the **Connect Math** icon.
- b) Click on McGraw-Hill Campus.
- c) You will see our text book, click on the Connect Math box (below the picture) After you enter this the first time, the Blackboard and Connect Math will be linked and your Connect Math grades will automatically be brought over to Blackboard as you complete them.