

# Syllabus

**Course:** STA 225 Introductory Statistics (CT) **Term:** Spring 2018 **Section:** 206 **CRN:** 4989

**Instructor:** Nick Bedway  
**Office:** Gullickson Hall 212N (Huntington Campus)

**Office Hours:** By Appointment  
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**Required Texts:** *Elementary Statistics – A Step by Step Approach (A Brief Version)* by Bluman (Seventh Edition)

**Computer Requirements:** This class requires a scientific or graphing calculator. The math department recommends the TI-83/84. This is the calculator I will utilize in class. All electronic communications will be through your Marshall E-Mail. If you use another e-mail service, please have your Marshall e-mail forwarded to that e-mail address.

**University Computing Services' Acceptable Use Policy:** All students are responsible for knowing this policy, which can be found on the web at [http://www.marshall.edu/ucs/cs/acceptable\\_use.pdf](http://www.marshall.edu/ucs/cs/acceptable_use.pdf).

**Course Description:** Introductory Statistics (CT) (3 hours) 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. (PR: (a) ACT  $\geq$  21, or (b) SAT  $\geq$  500, or (c) MTH 121, 123, 127, 130E, 122, or 130).

## CRITICAL THINKING "CT" RELATED LEARNING OUTCOMES ADDRESSED, PEDAGOGICAL METHODS, AND CLASSROOM ASSESSMENTS

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
<p><b>1: Integrative Thinking:</b></p> <p>Students will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations.</p>	<p>Homework</p> <p>Quizzes</p> <p>Classroom Discussions</p>	<p>Exams</p> <p>Project</p> <p>Comprehensive Final</p>
<p><b>2: Communication Fluency:</b></p> <p>Students will develop cohesive oral, written, and visual communications tailored to specific audiences.</p>	<p>Classroom Discussions</p> <p>Quizzes</p> <p>Project</p>	<p>Project</p>
<p><b>3: Inquiry Based Thinking:</b></p> <p>Students will formulate focused questions and hypotheses, evaluate existing knowledge, collect and analyze data, and draw justifiable conclusions.</p>	<p>Classroom Discussions</p> <p>Quizzes</p> <p>Project</p>	<p>Project</p>
<p><b>4: Metacognitive Thinking:</b></p> <p>Students will evaluate the effectiveness of a project plan or strategy to determine the degree of their improvement in knowledge and skills.</p>	<p>Classroom Discussions</p> <p>Project</p>	<p>Project</p>
<p><b>5: Quantitative Thinking:</b></p> <p>Students will analyze real-world problems quantitatively, formulate plausible estimates, assess the validity of visual representations of quantitative information, and differentiate valid from questionable statistical conclusions.</p>	<p>Homework</p> <p>Quizzes</p> <p>Classroom Discussions</p>	<p>Exams</p> <p>Project</p> <p>Comprehensive Final</p>

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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
The Student will be able to use the elementary tools of data collection, description, and analysis.	Students will practice this outcome by doing homework and in class activities	Students will be assessed on this outcome using online homework assignments, tests and comprehensive final exam.
The Student will be able to interpret the results of statistical studies.	Students will practice this outcome by doing homework and in class activities	Students will be assessed on this outcome using online homework assignments, tests and comprehensive final exam.
The Student will be able to design and carry out simple experiment.	Students will practice this outcome by doing homework and in class activities	Students will be assessed on this outcome using online homework assignments, tests and comprehensive final exam.
The Student will be able to Use a computer spreadsheet program to carry out these tasks.	Students will practice this outcome by doing homework and in class activities	Students will be assessed on this outcome using online homework assignments and discussion questions.

**Academic Honesty:** Students are expected to present their own work on all tests and homework quizzes. Asking questions, discussing solutions with other students —**not copying the work**—is an essential part of the learning process. **Know the difference.** If you have any questions about the policy to be followed, please see pages 73-74 of the 2016-17 undergraduate catalog or go to this webpage: [http://www.marshall.edu/catalog/files/UG\\_16-17\\_published\\_08-25-16.pdf](http://www.marshall.edu/catalog/files/UG_16-17_published_08-25-16.pdf)

**Inclement Weather Policy:** Any announcement about school closings may be found by: announcements on one of the four local FM radio stations: Big Country 99.5, The River 101.5, Sunny 93.1, and The Frog 92.1; check the website [www.marshall.edu/movc](http://www.marshall.edu/movc); or the weather hotline (304) 674-7239.

**Disabled Students: IF YOU HAVE ANY DISABILITY** that may prevent you from full participation in any of the activities of this class, please let me know as soon as possible so that arrangements can be made and be sure to register with the Office of Disabled Student Services or with the H.E.L.P program. Accommodations in testing, readers, tutors, and extra help sessions are available, but only after a discussion with the office of D.S.S. or H.E.L.P and me.

**Equal Opportunity/Affirmative Action Policy:** This course will follow Marshall University’s policy on Equal Opportunity/ Affirmative Action, which can be found on p. 70 of the 2016-17 undergraduate catalog or go to this webpage: [http://www.marshall.edu/catalog/files/UG\\_16-17\\_published\\_08-25-16.pdf](http://www.marshall.edu/catalog/files/UG_16-17_published_08-25-16.pdf). Specifically, all students will be afforded equal opportunity without regard to race, color, sex, religion, age, disability, national origin, or sexual orientation.

**Attendance Policy:** You will gain the most from this course by attending and participating. Therefore, unexcused absences from three or more classes will result in an F. Students must provide evidence to justify a University Excused Absence on the first day you return to class.

**Homework/Quiz Policy:** Homework will be assigned every class meeting. Online homework quizzes will also be assigned and need to be completed by the due dates in the assignments. In Class Quizzes will also be given. Any unexcused absence on the day of a quiz will result in a score of zero.

**Exam Policy:** There will be a total of three in-class exams and one comprehensive final covering the material from the text. The approximate time-frame for these exams is given later in the syllabus. Valid excuses for missing an exam fall into five categories: university-sponsored activities; student illness or critical illness/death in the immediate family; short-term military obligation; jury duty or subpoena for court appearance; or religious holidays. If you miss an exam due to an excused absence, you are allowed to take a makeup test at the instructor’s and your earliest convenience. If you miss a test due to an unexcused absence, you will receive a grade of 0 for that test. By university policy, an unexcused absence from a final exam earns an F in the course (page 94 of the 2016-17 undergraduate catalog). **The final will be on Monday, April 30, 2018 at 5:00 pm in our classroom (Rm. 127).**

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## Evaluation/Measurement of Learner Outcomes

Attendance	5.0%
Project	15.0%
Homework/Quizzes	15.0%
Exams (3 @ 15% each)	45.0%
Final	20.0%
<b>Total</b>	<b>100.0%</b>

## Assessment Evaluation Methods:

- A four-part group project from a data set. More information will be provided in the first part of the semester.
- Homework and/or quizzes covering each section. Quizzes will be multiple choice and short answer questions.
- Three exams will be evaluated by multiple choice questions and written questions. Letter grades will be assigned for each exam, but the exam grade will be computed using the exact point scores, not by averaging letter grades.
- A final exam will be evaluated by multiple choice questions and written questions. Letter grades will be assigned for the exam, but the final exam grade will be computed using the exact point scores, not by the letter grade.

## Grading Policy:

Grades will be assigned according to the following scale:

90 – 100%,	<b>A</b>	60 – 69 %,	<b>D</b>
80 – 89 %,	<b>B</b>	59 – 0%,	<b>F</b>
70 – 79 %,	<b>C</b>		

**Dissemination of Announcements and Additional Course Information:** The instructor of this course will make every effort to disseminate all information pertinent to the class during the normal class meetings; however, times arise when it is necessary to disseminate information outside the normal meeting times. The instructors, in this case, will use the Marshall University E-mail system to disseminate any pertinent information to the student. The student is expected to check his/her email twice daily.

## Tentative Weekly Schedule

Week	Date	Topic	Week	Date	Topic	Week	Date	Topic
<b>1</b>	Jan 8	Introduction	<b>6</b>	Feb 12	4.3—4.5	<b>11</b>	Mar 26	8.4—8.6
	Jan 10	1.1—1.5		Feb 14	5.1—5.2		Mar 28	9.1—9.3
<b>2</b>	Jan 15	<b>No Class, MLK Day</b>	<b>7</b>	Feb 19	5.2—5.3	<b>12</b>	Apr 2	9.3—9.5
	Jan 17	2.1—2.2		Feb 21	6.1—6.2		Apr 4	<i>Review for Exam 3</i>
<b>3</b>	Jan 22	2.3—2.4	<b>8</b>	Feb 26	6.3—6.4	<b>13</b>	Apr 9	<b>Exam 3</b>
	Jan 24	3.1.—3.2		Feb 28	<i>Review for Exam 2</i>		Apr 11	10.1—10.2
<b>4</b>	Jan 29	3.3—3.4	<b>9</b>	Mar 5	<b>Exam 2</b>	<b>14</b>	Apr 16	10.3, 11.1
	Jan 31	<i>Review for Exam 1</i>		Mar 7	7.1—7.2		Apr 18	11.2—11.3
<b>5</b>	Feb 5	<b>Exam 1</b>	<b>10</b>	Mar 12	7.3—7.4	<b>15</b>	Apr 23	Catch-Up
	Feb 7	4.1—4.3		Mar 14	8.1—8.3		Apr 25	<i>Review for Final</i>

## Important Dates

**January 8** - First Day of Classes

**March 19 – March 24** - Spring Break

**January 8 – January 12** - Late Registration

**March 26** - Classes Resume

**January 15** - University Closed, Martin Luther King, Jr. Day

**April 23 – April 27** - “Dead Week”

**January 16** - “W” Withdrawal Period Begins

**April 27** - Last Day to Completely Withdraw

**February 26** - Freshmen Mid-Term Grades Due

**April 30** - Final Exam

**March 16** - Last Day to Drop a Full Semester Individual Course