Hello.

The following is a sample syllabus for MATH 017/117 – Elements of Statistics.

Please know that a syllabus may vary in important ways from semester to semester, from instructor to instructor, and so on. While this document provides a general view of course expectations and workload, it is not intended to exactly represent all sections of this course.

Thank you.

Montgomery College
Department of Mathematics and Statistics
Course Syllabus Math 117/Math 017

GENERAL COURSE INFORMATION

Title: MATH 117-Elements of Statistics –CRN: _____ 3 Credits
(Linked with Math 017 - Support Course -CRN _____ 2 credits)

The MATH 017 Support Course is in fact not a separate course – rather it extends the usual MATH 117 class into a 5 credit experience combining the content of MATH 117 - Elements of Statistics with **arithmetic/algebra remediation and academic support.**

Please note that a student who enrolls in a MATH 017/117 linked pair and does not earn a passing grade will generally be required to enroll in another MATH 017/117 linked pair in the following semester if the student still wishes to try and earn credit for MATH 117.

Class Time/Days/Room:

Course Webpage: Blackboard inside MyMC

INSTRUCTOR INFORMATION

Name:
Office:
Email:
Office hours:

Textbook (Required): One of the following two textbooks is required. You can purchase it from the Campus Bookstore if you'd like.

1) WileyPlus with online-only version of book, Lock: *Statistics 2e*, WileyPlus. Access code from the Bookstore, ISBN:9781119163626 (Note - this may also be purchased directly from www.wileyplus.com for a slightly lower price)

OR

2) WileyPlus with online-only version of book **and loose-leaf text,** Lock: *Statistics 2e*, WileyPlus. Access code from the Bookstore, ISBN:9781119309499 (Note - this may also be purchased directly from www.wileyplus.com for a slightly lower price)

Once you have an access code for WileyPlus,

You will need to create a new WileyPLUS account in order to gain access to the new WileyPlus' platform. Please click the link https://www.wileyplus.com/go/login to create a new account in order to get access the resources (e-text , learning materials, assignments, etc) in the platform.

Calculator (required): A graphing calculator is required for this course. TI-83 Plus or TI-84 preferred; TI-84 is preferable.

The Math 117 Part

Course Description

An introductory noncalculus statistics course to serve a variety of students who need a working knowledge of statistics. Descriptive analysis and treatment of data, probability and probability distributions, statistical inferences, linear regression and correlations, chi-square, and some nonparametric statistics. Preexisting statistical computer programs may be used for some applications. Credit may not be earned in both MATH 117 and MATH 117A. (MATF) PREREQUISITE: A grade of C or better in MATH 093, MATH 096, or MATH 115A; appropriate score on mathematics assessment test, or consent of department. Assessment levels: ENGL 101/101A, READ 120. Three hours each week.

Topics to be covered

We will cover Chapters 1 (sections 1.1-1.3), Chapters 2 (sections 2.1-2.7), Chapters 3 (sections 3.1-3.4), Chapters 4 (sections 4.1-4.5), Chapters 5 (sections 5.1-5.2), Chapters 6 (sections 6.1-6.13), and Chapters 7 (section 7.2).

Evaluation Methods (Required*)

Exams/HW/Activities	**Topics/chapters or Notes/Directions**	**Contributes to the final grade**	**Due Date for HW/Exam Date**
Daily WileyPlus/online – HW*	Selected exercises form the text	All together - 15%	Check it online—WileyPlus after each class
Writing Assignment and Oral Presentation*	Will be available soon in Blackboard	All together—6%	
Test 1*	Chapters 1, and 2--(3 & 2/3 weeks)	18 %	
Test 2*	Chapters 3, and 4--(3 weeks)	18%	
Test 3*	Chapters 5, and 6--(4 & 1/3 weeks)	18%	
Final *	Departmental Comprehensive Exam	25%	**_____: Tuesday-8:00 a.m.-10:00 a.m.**

- Time will be allocated to a final project presentation (1 week) and review for final (1 week).
- Your mid semester grade will be calculated based on your scores of first two tests, & the online HW for Chapters 1 to 4.

- The tests (Test 1, Test 2, and Test 3) will be mainly based on class lecture notes, WileyPlus online HWs and worksheets.
- There is no guaranty that the final exam will be 100% based on materials in the platform; however, there will be a final review package, and reviewing this package and your tests may help to improve your score on the final exam.

Important

- In order to be successful in this class you need to

✓ Take lecture notes every day and refer to them whenever you need them.
✓ Attend class fully and do your daily homework on time.
✓ Study at least 2 hours per day at least three days per week
✓ Make use of free tutoring services such as Ackerman Learning Center, etc. as needed.

- There will be a writing assignment, and it is a group assignment (4-5 people in one group). The writing assignment as well as its instructions will soon be available in Blackboard. You need submit a hard copy of it along with the article to me in class on _____ . The main idea of the writing project is to search in the Internet a scientific article written based on statistical data that is close to your heart (sport, health issues, US presidential election, student college doubt, etc.) and

    a. write a general summary of the article and discuss all statistics, parameters, and graphs related to the article,
    b. explain why it is interesting to you,
    c. discuss if this study is a population or a sample study, and if this is a sample study, discuss why the study may be based on a biased sample and hence may not be generalizable to the population under study,
    d. clearly write the role of each individual contributions in this writing assignment and its presentation on the document, and
    e. give a 10-minute class presentation.

- If the college is closed on an exam date, the exam will be administered during the next schedule class period if it is appropriate. Otherwise, information containing the rescheduling of your exam will be sent through your Montgomery College email address or through course page: Blackboard. So, please check your Montgomery email and Blackboard regularly.

Grading Policy and Criteria

90-100…A 80-89….B 70-79…C 60-69…D below 60…F

Make-up Policy: No make-up exams (tests and final exam) will be given except under extraordinary circumstances (a documented serious illness, death in the family or a documented car accident, for example); when such circumstance arises, it is your responsibility to contact me by e-mail on or before the date of the exam in order to discuss the issue.

Attendance Policy: You are expected to attend the class regularly and fully (to come to the class on time and leave the class on time). Attendance may be taken at the end of every class. If you have to miss a class, it is your responsibility to find out what you have missed.

Email Communication Statement MC student e-mail is an official means of communication for Montgomery College. Students are responsible for information and announcements sent via MC e-mail, and it is expected that students check their student e-mail regularly. When e-mailing me, you need to use your MC e-mail account in order to get reply from me. Also, please write also your first name, last name, and your class in your email message.

Accommodations for Students with Disabilities Statement:
Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hour. In order to receive accommodations, a letter from Disability Support Services (R-CB122; G-SA175; or TP/SS-ST120) will be needed. Any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations are at: www.montgomerycollege.edu/dss/evacprocedures.htm.

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, is urged to contact the Dean of Students Affairs on your campus. Furthermore, please notify the professor if you are comfortable in doing so. This will enable the professor to provide any resources that they may possess. We know this can affect performance in the course and Montgomery College is committed to your success. The Deans of Student Affairs are: Dr. Jamin Bartolomeo (GT), Dr. Tanya R. Mason (RV), and Dr. Clemmie Solomon (TPSS).
http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=55

MATH 117 Course Outcomes

Upon completion of this course the student will be able to:

- Calculate and interpret confidence interval estimates of population parameters (proportions and/or means).
- Demonstrate an understanding of the importance that random sampling and randomization play in producing data that allow one to draw conclusions about the underlying populations.
- Explain that statistical procedures have specific requirements necessary for their application and verify that the fulfillment of these requirements has been satisfied for the situation with which the student is dealing.
- Express in clearly written form, and always in the context of the particular problem situation, the results of statistical investigations and analyses
- Formulate and conduct tests of significance for population parameters (proportions and/or means) and interpret the results in the original context.
- Use a variety of graphical and numeric tools to explore and summarize categorical and quantitative data, including linear models of associations between two quantitative variables.

- Use statistical software (computer- or calculator-based) to explore and analyze data and interpret the results produced by that software in context.
- Use the results of the central limit theorems for sample proportions and sample means to predict the long-term patterns of variation of those statistics under repeated sampling based on an understanding of the normal distribution.

The Math 017 Information

Description: A corequisite designed to equip students with the skills needed to be successful in MATH 117 by providing support in fundamental mathematics. Topics include operations on real numbers, evaluation of algebraic expressions, solving linear equations and inequalities, and analyzing and interpreting graphs.

Prerequisite(s): Appropriate score on mathematics assessment test; or consent of department.

Corequisite: MATH 117, Elements of Statistics

Assessment Level(s): ENGL 101/101A or AELW 940/ELAI 990, READ 120 or AELR 930/ELAR 980.

Two hours each week. Two equivalent credit hours. Not applicable to a degree or certificate. May not be used to satisfy degree requirements. Not included in GPA calculation.

MATH 017 in NOT a separate course – the content below is embedded throughout the material covered throughout the semester.

MATH 017 Outcomes:

Upon course completion, a student will be able to:
• Perform operations with real numbers
• Recognize and apply absolute values and ordering of real numbers
• Evaluate expressions using the order of operations
• Solve applications involving rational numbers
• Calculate the mean and median of sets of data
• Analyze and interpret graphs of data sets
• Analyze and solve application problems involving basic probability

Important Student Information Link
In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The ***link below provides*** *information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register*

for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions, please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.
http://cms.montgomerycollege.edu/mcsyllabus/

The instructor reserves the right to amend this syllabus as appropriate throughout the semester. Students will be notified of any such changes.