MATH 111 General Education Statistics Washington Community High School Spring 2023

INSTRUCTORS: Tom Smith Room 248 (309) 444-3167 Ext 1248

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Description: This course includes a study of frequency distribution, graphs (histograms, pie charts, etc.), measures of location (mean, median, mode and percentile), measures of dispersion (variance, standard deviation), linear regression and correlation, probability, binomial distribution, normal distributions, statistical inference and hypothesis testing.

Prerequisites: MAT 098 and MAT 095 with a grade of "C" or better, or two years of high school algebra and one year of high school geometry.

Course Objectives:

- To acquire a usable understanding of the language and symbols of basic statistics.
- To understand the role probability plays in statistical inference.
- To provide graphic displays for data and interpret graphs and charts.
- To develop the ability to use the calculator to complete and interpret the results of statistical experiments.

Required Text & Access Code: Our textbook is: "Fundamentals of Statistics", *Michael Sullivan III*, (Pearson-Prentice Hall, 5th Ed.). You will also need a Pearson MyLab/Mastering access code (also known as MyMathLab or MyStatLab). Your best options for purchasing the access code are:

OPTION 1

1. Buy a new text that is bundled (shrink-wrapped) and says that a MyStatLab (or MyMathLab) Access Kit is included.

OR... OPTION 2

2. **Buy just the Access Kit**. The text will then be available to you online; this will be your cheapest option if you are comfortable doing your reading on the computer. The access code can be purchased at the bookstore (which may be necessary for you if you are using financial aid), or directly from the website with a credit card (generally a little bit cheaper than purchasing from the bookstore).

Illinois Central College

To register for the website please go to <u>http://pearsonmylabandmastering.com</u> and follow the on-screen instructions. The Course ID # is: smith42729

It is possible to purchase an access code separately from the text, but it is not usually cost effective to do so (even for a used book). Also, buying a code from a third party (such as Amazon) is risky!! These codes are frequently expired or invalid (see the customer comments). Please be sure that you wish to continue in the course before you un-wrap your purchases, as you will not be able to return for a refund once it is opened.

Technology: Either a **TI 36X Pro** or a **TI 83/84 series** calculator is **required.** The TI 36X Pro is your cheapest option. I would suggest that if you do not already have access to a TI 83/84 calculator, you should just purchase a TI 36X Pro.

Attendance: Regular attendance is required to successfully complete this course and attendance will be taken at the beginning of each class. Three unexcused absences will be granted without penalty, however each unexcused absence over and above the three is considered excessive (refer to ICC catalog). Missing more than 5% of the total classes may result in the student being administratively withdrawn at midterm or receiving a FA. This will affect financial aid. In the case of an unavoidable absence, the student should inform the instructor *prior* to the class in question, wherever possible. Activities such as sleeping in class, disruption of class and/or other students and excessive tardiness/early departure, will *not* be considered as successful attendance. In the event of absence it is the responsibility of the student to find out what material and information he or she missed.

Administrative Withdrawal: At midterm (as required by the State of Illinois) the instructor must identify and report students that are enrolled in the course but have either never attended class or are considered "non-attenders". These students will be administratively withdrawn from the course at that time. A "non-attender" is a student who has attended class at some point but, in the opinion of the instructor, is no longer actively pursuing completion of the course. An example of this might be (but is not limited to) a student who has not attended class, or completed any assignments for two weeks prior to the midterm reporting date.

"FA" Grade: A student that has *not* been administratively dropped at midterm but stops attending the class during the 9th or 10th week will be given a final grade of "FA" (failed due to lack of attendance). An FA grade may affect your financial aid situation. If you are not receiving financial aid, the FA grade is effectively the same as an F.

Homework: For each section in the text there is an online homework assignment (through the MyLab/Mastering website) that the student is required to complete, on their own time. It is your responsibility to complete all homework before the due date – extensions will not be given except in well documented, extenuating circumstances.

Tests: There will be five chapter tests (one online and four in-class) and a comprehensive final exam. <u>Make up tests will not be granted except in the cases of a college-sponsored</u> <u>activity or documented extenuating circumstances</u>. In either case the student must provide prior notification and make arrangements to make-up the test before the next class meeting. Only one make-up per student, per semester will be permitted.

For the in-class tests you will be allowed to prepare a handwritten $8 \ 1/2 - 11$ sheet of paper that you may use as a reference on the test. Keep those "cheat sheets" and use all 5 on the final exam.

Grading: The final course grades for the class is a weighted average (<u>not</u> based on total points) weighted according to the following categories:

		A - 90%+
Online Homework	30%	B - 80% to 89%
5 Tests (11% each)	55%	C - 70% to 79%
Final	<u>15%</u>	D - 60% to 69%
To	otal: 100%	F - below 60%

In borderline cases (defined as being within .5% point of the higher grade), the final grade may (or may not) be bumped up to the higher grade at the discretion of the instructor. For example, a person with a final overall grade of 79.5-79.9% will be *considered* for a "B" grade. This decision will be based on factors such as attendance, participation, and whether the student has shown improvement (or not).

The final overall course grades will be based on the students' academic achievement in the course alone. Outside factors such as graduation requirements and work commitments will NOT be considered.

Extra Credit: There are no extra credit opportunities in this course. You will NOT be able to improve your grade through ad hoc extra credit assignments.

Classroom Disruptions & Cell Phones: Please be sure to turn off any cell-phones during class. <u>You should not have your phone out during class at all.</u> Any disruption of class or other students (talking during lecture, harassment of other students, etc.) will not be tolerated.

Academic Misconduct: Matters relating to academic honesty or contrary action such as cheating, plagiarism, or giving unauthorized help on examinations or assignments may result in the instructor giving a student a failing grade for the assignment, test, or for the course. *Based on the severity of the offense, the instructor may recommend dismissal from the college*.

Math Lab: The Math Lab is found on the second floor of the Library at the East Peoria Campus and Cedar Room 136, (309) 690- 6833 at the North Campus. No appointment is necessary. They offer a variety of services including tutorial help for any math class in which the student is enrolled. Any student that feels they might need additional help should seek it in a timely fashion. Don't take a 'wait and see' attitude!

Access Services: Assistance for students with sensory, physical, mental, health and learning disabilities is available. In order to receive academic accommodations related to their disability, the student must be registered with the Access Services office (Rm. L208B). For more information please contact Terri Ingles, Coordinator of Access Services at 694-5749.

Workload: You should expect to spend a significant amount of time outside of class studying for this course. As a guideline, for a 3 credit class, it is expected that the student will spend 6 hours each week, outside of class, working on the course.

MATH 111 - GENERAL EDUCATION STATISTICS (M1 902)

Prerequisite: Approved reading placement score or equivalent and MATH 098 or MATH 099 or high school Algebra 2 or appropriate high school transitional math, any with a grade of "C" or better, or concurrent enrollment in MATH 081, or appropriate placement score or department approval. This course includes a study of frequency distribution, graphs (histograms, pie charts, etc.), measures of location (mean, median, mode, and percentile), measures of dispersion (variance, standard deviation), probability, estimating and predicting, normal distribution, binomial distribution, and correlation. This course will emphasize the quantitative portion of descriptive statistics -- gathering, analyzing, presenting and interpreting data.

3 Credit Hours (TC) - Lecture Hours: 3 Laboratory Hours: 0