

## *Course Syllabus: MA171—Winter 2016*

Class Time: 2:00 – 2:50 p.m. Monday, Tuesday, Wednesday, Thursday

Location: Westwood High School, Room 102

300 Westwood Drive, Ishpeming, Michigan

(Approximately 25 minutes west of NMU's main campus)

Instructor: Steven Annelin

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Office Hours: M-F: 7:30-8:00 a.m., Friday 2:00-3:00 p.m., or by appointment

### **Course content:**

The course consists of a study of the methods of elementary probability and statistics. Some time is devoted to finding probabilities for both discrete and continuous probability functions, and discussing the role probability plays in estimation and decision making. The main emphasis of the course, however, is on methods of describing data, finding sampling estimates and testing hypotheses. Throughout the course, applications are stressed as is the interpretation and understanding of the statistics and methods used.

**This course satisfies the Formal Communication Studies requirement.**

This course is designed to introduce students to the ways in which information and ideas are expressed using a communication system other than English. Such courses should foster the student's ability to conceptualize and communicate in an orderly, rational manner.

Characteristics of a communication system include: 1) possession of a grammar; 2) operation from an established set of rules; 3) reasoning properties such as deduction, inference drawing and problem solving. This includes courses in languages and those in which the central focus of the course is on statistics, computers or formal logic.

Upon successful completion of this course, a student should be able to:

1. Demonstrate the difference between Descriptive Statistics and Inferential Statistics
2. Determine sample spaces and find the probability of an event
3. Construct a probability distribution for a random variable
4. Compute a confidence interval for a mean and a proportion
5. Describe the definitions used in hypothesis testing
6. Compute the correlation coefficient and the equation of the regression line

Evaluation for the objectives of the course will be quizzes, tests, and a final exam.

### **Class Requirements:**

- Attendance—A critical component to success in this course. You will receive an attendance score (as a test grade), based on the percent of time you are in class. In case of an illness, e-mail me for missed work or check Educat. I typically post assignments on

EduCat so you can view them at your convenience. You need to notify me **in advance** if you are going to miss a quiz or test. Without notification there will not be an opportunity to make up those assessments.

- Homework—Another critical component to success in a math course. I will suggest homework problems from each section we cover so that you can practice the skills learned in class. Occasionally, I will collect homework and it will count worth 10% of your overall grade. Practice the habit of showing all of the work for problems as it will lead to the correct solutions when you take quizzes and tests. Try to avoid calculator dependency for simple computations.
- Grades—Your final grade will be calculated from a combination of points earned on any collected homework assignments (10%), quizzes and tests (60%), and a final exam (30%). There will probably be a test at the end of each covered chapter with at least 1 quiz during the chapter. Extra credit problems will only be given on quizzes and tests so please do not ask for any extra credit during the semester to “improve” your grade.

**Required Materials:**

Textbook:

- Elementary Statistics, 6<sup>th</sup> or 7<sup>th</sup> Edition by Allan Bluman
- Graphing Calculator (TI-84+ preferably)

**Grading Scale:**

90% - 100%	A's
80%-89.5%	B's
70%-79.5%	C's
60%-69.5%	D's
Below 60%	F

**University Policies**

- Academic Honesty: Cheating is not only unethical and pathetic, but is a violation of the Northern Michigan University Student Code and University Policies and grounds for dismissal from the University.
- Discrimination and Harassment: Northern Michigan University does not unlawfully discriminate on the basis of race, color, religion, national origin, gender, age, height, weight, marital status, handicap/disability, sexual orientation or veteran status. If you have a civil rights inquiry, contact the Affirmative Action Office at 906-227-2420.
- Americans with Disabilities Act Statement: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.
- The Registrar: Withdrawing from any course, or any matters related to registration are the responsibility of the student. For more information regarding this topic, go to the Registrar's Website.