MONTEZUMA COMMUNITY SCHOOL Iowa Valley Community College Marshalltown Community College COURSE SYLLABUS

| COUDCE NUMBED | |
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| COURSE NUMBER: | MA1156 Section M01 |
| COURSE TITLE: | Statistics |
| ACADEMIC TERM: | Fall 2017 |
| SEMESTER CREDIT HOURS: | 3 |
| DEPARTMENT: | Mathematics |
| REQUIRED MATERIALS: | Elementary Statistics, 11 th edition, by Triola. |
| The TI-83 Plus calculator is recommended i | n order to work the calculator problems in the course |
| INSTRUCTOR: | Mrs. Pargeon |
| WORK TELEPHONE: | (641) 623-5121 |
| E-MAIL: | apargeon@montezuma.k12.ia.us |
| DATE SYLLABUS WAS COMPLETED | (REVISED: August 10, 2017 |

COURSE DESCRIPTION: Descriptive statistics, probability concepts, binomial and normal distribution and introduction to inference.

PREREQUISITIES: COMPASS algebra score of 55 or better, COMPASS college algebra score of 25 or better, ACT math score of 20 or better, grade of C- or better in MAT062, midterm grade of A- or better in MAT074*, or grade of C- or better in MAT077

QUALITY STANDARDS/Performance Objectives/Course Objectives:

Upon successfully completing this course, students should be able to: (use as many as necessary)

- 1. Identify and use statistical vocabulary (Chapter 1)
- 2. Organize and summarize univariate data (one variable data). (Chapters 2 & 3)
- 3. Apply concepts involving **probability**. (Chapter 4)
- 4. Construct a **probability distribution** for a random variable. (Chapter 5)
- 5. Apply principles of the **normal distribution** using the standard normal distribution tables. (Chapter 6)
- 6. Apply the properties of the **confidence intervals**. (Chapter 7)
- 7. Apply the concepts of hypothesis testing. (Chapter 8)
- 8. Find and interpret relationships between variables using Correlation and Regression (Chapter 10)

PERFORMANCE STANDARDS AND ASSIGNMENTS MATRIX:

| Assessment Matrix (Matrix corresponds with Quality Standards above.) | | | | | | | | |
|--|------|-------|--------------|---------|------------|-------------|---------------|------|
| Standard | Exam | Paper | Presentation | Project | Assignment | Observation | Participation | Quiz |
| 1. – 8. | Х | | | Х | Х | | Х | Х |

GRADING AND EVALUATION:

| Quizzes/Tests Project * | | 65% 10% | * Data collected early in the course will be analyzed throughout the course each time a new method can be applied to it. The results |
|----------------------------------|----|------------|--|
| Homework Assignmen Final Exam | ts | 20% 5% | will be submitted as a statistical analysis project. |
| GRADING SCALE: | А | 100-95% | |
| | A- | 94-93% | |
| | B+ | 92-90% | |
| | В | 89-84% | |
| | B- | 83-82% | |
| | C+ | 81-79% | |
| | С | 78-73% | |
| | C- | 72-70% | |
| | D+ | 69-67% | |
| | D | 66-63% | |
| | D- | 62-60% | |
| | F | 59-0% | |
| | | | |

METHOD OF INSTRUCTION: Assigned readings, videos, in-class presentations/demonstrations, discussion, learn by doing.

EVALUATION/CLASS POLICIES:

Academic Integrity: The very nature of higher education requires that students adhere to accepted standards of academic integrity. The Code of Academic Conduct for Iowa Valley Community College District and Montezuma Community School is found in the Student Handbook include cheating, plagiarism, and fabrication, abuse of academic materials, complicity in academic dishonesty, falsification of records and official documents. **Plagiarism/academic dishonesty**: is a serious violation of MCC's and MHS's Student Conduct Code. Instructors handle violations in various ways, but you should be aware that further administrative disciplinary actions may be taken, up to and including course failure and expulsion from the college class. Please learn about plagiarism and how to properly cite others' work.

Consequences: Cheating/Plagiarism will result in a zero grade on the first assignment, and a failing grade for the course on the second infraction.

Classroom Behavior: Students are expected to be courteous to each other, and to the instructor.

| | Readings and Material Covered | Assignments Due |
|---------|-------------------------------|--|
| Week 1 | Chapter 1 | Data Collection Project |
| Week 2 | Chapter 2 | Chapter 1 |
| Week 3 | Chapter 3 | Chapter 2, Data Graphing Project work |
| Week 4 | Chapter 3, Quiz 3 | Chapter 3, Data Analysis Project work |
| Week 5 | Chapter 4 | |
| Week 6 | Chapter 4, Quiz 4 | Chapter 4 |
| Week 7 | Chapter 5, Quiz 5 | Chapter 5 |
| Week 8 | Chapter 6 | |
| Week 9 | Chapter 6, Quiz 6 | Chapter 6 |
| Week 10 | Chapter 7 | |
| Week 11 | Chapter 7, Quiz 7 | Chapter 7, Confidence Interval Project work |
| Week 12 | Chapter 8 | |
| Week 13 | Chapter 8, Quiz 8 | Chapter 8, Hypothesis Test Project work |
| Week 14 | Chapter 10 | Chapter 10 |
| Week 15 | Final | Final submission of Project |

TENTATIVE SCHEDULE:

(This syllabus is not a contract. The instructor reserves the right to make syllabus/course changes as needed to improving the learning experience.)