Math 102.001

## Winter 2018

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**Course Summary**: Mathematical Decision Making is mathematics for students who want a better understanding of the real-life mathematics that all people face. It is especially designed for those who have struggled with mathematics in the past. The course stresses the application of mathematics to personal and social issues, rather than stressing the abstract ideas found in many mathematics courses. Like Math 101, this is a project-based course that prepares students to function in real-life situations involving quantitative data.

At CWU, Mathematical Decision Making is often selected to satisfy the "reasoning" requirement for graduation. It is real-world applicable and serves to prepare students for mathematics that will be encountered in other core courses. It also helps to develop a student's ability to reason quantitatively to achieve success in their future careers and personal lives. Basic course goals include:

- · Analyzing counting techniques pictorially, algebraically, numerically and graphically.
- · Investigating real-world problems with appropriate probability and statistical descriptions.
- · Understanding the connection between probability and statistics
- · Using technology to help solve problems, experiment, interpret results and verify conclusions.
- $\cdot$  Determining the reasonableness of solutions.

## **Special points of interest:**

- All work submitted must represent the work of the student. Students may get assistance from others during the homework but not tests. Collaborating on a test will result in at least a "0" for each student on that test and likely a failing grade for the class.
- <u>All Homework</u> is completed through MyMathLab.
- Students must register for MyMathLab (see instructions on the Syllabus tab in Canvas).
- The class will become routine as each of the sections covered will progress in similar fashion. First, a lecture using PowerPoint slides will be covered by the instructor. Typically, this will be followed the next day by an overview of a worksheet or in class project designed to prepare students for completing the homework. Homework is assigned through MyMathLab.

- Sometime during the Unit a group project will be assigned. This project will be discussed in the lecture and typically a class period (the time allotted to the day's lesson) will be set aside for the project. It is imperative that students work diligently to complete the project with their group. The project should not be considered complete until after each group member reviews the work and agrees with the material. Real world application means we can work well with others and contribute to the completion of assigned work!
- I will be happy to do homework problems during the lecture. You must get the problems to me early enough so that I can include them in the instruction for that day.
- Be prepared for graded online tests for each section we cover in this course. These will also be completed online through MyMathLab. Problems will be similar to homework and worksheet problems. Your quizzes are timed, so fluency is important.
- There will be three chapter tests and a final exam. Both tests are timed, so students must be familiar with the material and the mathematical processes and skills that are important. For the final students will be allowed a note card, but again I stress the importance of being familiar with the mathematics involved.
- Additionally group projects are a significant part of this class. Students need to learn how to be a good group member and be able to work together. At least three projects will be assigned.
- I am teaching this class for the first time and I will need your patience as I try to develop a course that meets the needs of students as well as meets my own needs as the instructor. I like statistics and I hope I can get you to have an appreciation for it as well.
- Grades will be based on a composite score from homework, tests, in class quizzes, projects the final—students generally get high scores on the homework (multiple attempts are allowed), whereas the quiz/test scores are often significantly lower! Daily homework is assigned but not collected.
- Grades are based on total point percentages, I do not round.
  - A=93%, B=83%, C=73%, D-63%
  - $\circ$  A minus grade would be (-3%) and a plus grade would be (+4%)
- Mutual respect must take place at all times in this classroom. At no time will any type of bullying, harassment, or discrimination be allowed. It is my intent to never disrespect a student or allow disrespect in my class. If you ever feel I have been distrespectful I encourage you to discuss this with me. I will do my very best to make things right.
- Students with special needs should contact me and the Center for Disability Services in Bouillon 140.

## Necessities:

- Come to class. Math requires a daily commitment to become successful. We also will be using many supplements to the text. You will need to be here to understand the material.
- The required text is Mathematics A Quantitative Reasoning Approach, 6th Edition by Bennett & Briggs

- You should have a scientific calculator and preferably a graphing calculator. ( I will be using a TI-84).
- Get yourself the help you need. I am more than happy to help you as much as possible. Beyond that, form study groups and take advantage of the math center here on campus.
- Participate in class discussions. The best learning takes place when students ask questions.
- Mutual respect must take place at all times in this classroom. At no time will any type of bullying, harassment, or discrimination be allowed.
- Students with special needs should contact me and the Center for Disability Services in Bouillon 140.
- Communicate with the instructor using email, calling, or by visiting during office hours.