

# MATHEMATICAL DECISION MAKING

Math 102-001, Spring 2016

M-F 1:00-1:50 PM, Bouillon 109

**Instructor:** Tyler Suronen

**Office:** Black 225-40

**Office Hours:** M-F 2-2:50 PM

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**Text:** *Using & Understanding Mathematics: A Quantitative Reasoning Approach*, by Jeffrey Bennett and William Briggs

**Description:** Selected topics from probability, statistics and mathematical decision making with real world application.

## Required Materials:

- Text: I teach primarily from the text. Read along as we cover the material. Homework problems will be assigned from the text.
- Scientific calculator: For lectures your cell phone will suffice, but for obvious reasons we cannot allow the use of phones during testing situations. *Again: phones are not an acceptable substitute in testing situations.*
- Internet access for:
  - E-mail: Primary method of communication outside of class and office hours.
  - Canvas: For announcements and additional materials.

**Attendance:** Daily attendance is important for your success in this course. It will be your primary source for learning in this course. Announcements will be made during lecture and assignments given and received. If you are absent, you are responsible for obtaining any information or materials presented in lecture. If you anticipate being absent for an extended period of time please talk to me well in advance. Please bring your text and calculator to every lecture. The calculator will be handy for in-class work (which will be frequent) and the text will be used to reference tables, graphs, etc.

## Grade percent breakdown:

- HW 20%
- Quizzes 30%
- Final Exam 20%
- Projects 30%

**Grades:** You must show all work. Answers without adequate justification will not receive full credit. Any kind of guess-and-check solution or recalling the solution without showing the process will not suffice. Occasionally, answers without work or explanation will be acceptable (e.g. reading values from a graph) and I will make it explicitly clear when such problems are

given. I will make clear the amount of detail necessary with examples in lectures. Problems will be done by hand unless explicitly stated otherwise. Answers should be presented in exact form unless explicitly stated otherwise (that means giving as many digits as you are given: no rounding).

Your overall grade will be calculated by percentage of completed work with the following cutoffs (+/- grades will be determined later roughly following the standard of 3 points above and below the cutoffs).

$$\begin{aligned}90 &\leq A \\80 &\leq B < 90 \\70 &\leq C < 80 \\60 &\leq D < 70 \\F &< 60\end{aligned}$$

**Homework:** Homework will be assigned frequently (including the final week of instruction). Homework will be posted to canvas under the “Assignments” section. Homework is worth 20% of your total grade. Although homework will vary in length, each is worth the same percent of your grade. The homework will reflect the material covered recently in class. It is expected that you keep up with the homework. You are expected to attempt all problems. Worksheets will be due during lecture on the day they are due. I will take homework questions at the start of lectures and accept the worksheets afterwards. If you struggle with homework I recommend that you: 1. Talk to me 2. Check your notes and the text 3. Consult your fellow students and your friends. My only warning is that you don’t become dependent on others for their assistance/knowledge/support.

**Quizzes:** We will have a quiz during any week that we do not have an exam (including the final week of instruction). Quizzes will typically be given at the end of the week and regard the most recent material covered in class. You must be present to take the quiz during the time it is given. In the event of planned or unplanned absence each student will be allowed one quiz retake regardless of circumstance. The retake must be completed at the earliest possible date before the next quiz or exam. In the event of any additional planned absences you may speak to me in advance to reschedule the quiz. All quizzes combined are worth 30% of your grade.

**Final Exam:** The final will be held on Wednesday June 8th 12:00-2:00 PM in our regular classroom. The final will be two hours long, the material will be comprehensive, and is worth 20% of your grade.

**Projects:** There will be three group projects on Probability and Statistics. Groups will be assigned, then your group will choose together from a number of topics and work to complete a task related to the topic over a number of weeks. Some projects may involve a brief presentation which will be graded.

**Late work and Make-ups:** No late homework will be accepted. Early homework is welcome. In-class quizzes must be taken on the dates they are given (with the exception of one retake). Make-ups for exams are not given without good reason (including but not limited to severe illness and work/military requirements). If you need to make-up an exam missed

due to medical emergency I require a Doctor's note. In the event of unavoidable scheduling conflict for work a note and contact information for your supervisor will be required in advance.

**Academic Dishonesty:** Cheating will result in failure of the course and may have a larger impact on your standing with the university. Cheating includes copying work, hinting, helping, and using notes/book (when not instructed to do so) on an in-class quiz or exam.

**Classroom Equity:** It is my duty as your instructor to provide a safe and inclusive environment for learning. As students you are expected to share this commitment. Our shared responsibility is to welcome everyone to learn and to treat each other with dignity and respect. Mutual respect and nondiscrimination includes freedom from sexual harassment. CWU policy defines sexual harassment as unwelcome, sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature under particular conditions. Title IX considers sexual harassment to be a form of discrimination. If you experience sexual harassment, or know someone who is being sexually harassed, you are encouraged to report concerns to me, another faculty member or employee, or to Gail Farmer, Equal Opportunity, at 509-963-2206, farmer@cwu.edu, Bouillon 205. Complete policies are available online at [www.cwu.edu/hr](http://www.cwu.edu/hr).

**Accessibility:** Students who have special needs or disabilities that may affect their ability to access information or material presented in this course are encouraged to contact me or the Center for Disability Services (cgs@cwu.edu, 963-1202, Bouillon 140).

**Important Dates:**

March 29 First day of classes.

April 4 Add/Drop classes.

May 30 Memorial Day. No Classes.

June 3 Last day of classes.

June 8 FINAL EXAM