

MATHEMATICS 101. 007 Math in the Modern World BU 109 MTWThF 12 n – 1pm

Text: *Using and Understanding Mathematics: A Quantitative Reasoning Approach*, 4th Edition, by Bennett & Briggs, Pearson, Addison/Wesley Publishers, 2004 INSTRUCTOR: Jeanine “Joni” Pinkney

OFFICE HOUR: 2-3 pm PHONE: (tba) EMAIL: JPinkney@cwu.edu

Material Covered: Textbook: Prologue, chapters 1 – 5, 9, and special topics

Prerequisites: A minimum score on: the math section of the SAT of 500 or the math section of the ACT of 19 or the COMPASS test of 50, or successful completion of Math 100B

Your grade in this class will be composed on a scale of 1000 points, as follows:

Exams, including final exam 500 points

Entrance / exit questions 100 points

Individual projects 150 points (Project 1 = 50 pts; Project 2 = 100 pts)

Group projects 200 points (2 projects, each worth 100 points.)

Homework notebook 50 points

These points will be totaled and converted by percentage to the usual grading scale:

93: A	90: A-	
87: B+	83: B	80: B-
77: C+	73: C	70: C-
67: D+	63: D	60: D- (This scale may be adjusted slightly)

There will be unannounced entrance or exit questions during the quarter. Each is worth 10 points. Missed entrance / exit questions cannot be made up but the worst score will be dropped. There will be three exams given during the quarter, and a final exam. The first three exams will be worth 100 points each and the final will be worth 200 points. You may retake any exam (except the final) with the following conditions:

- 1) All homework must be completed for that given exam.
 - 2) Your grade can increase up to a full letter grade with a maximum increase to 89 (B+).
- Rationale: At CWU, Math in the Modern World is often selected to satisfy a General Education requirement for graduation. It is real-world applicable and serves to prepare students for mathematics that will be encountered in other core courses as well as in real life.

Supplies: Textbook, calculator, notebooks, graph paper, pencils, a folder with pockets, 3x5 index cards.

You will need a scientific calculator with memory, exponential and log functions. A graphics calculator such as the TI-83 is best, especially when we get to chapter 9. However, you may use a regular scientific calculator such as one from the TI30 series or a Casio FX series if you prefer. Make sure you have a calculator of your own and bring it to class every day. You may not borrow a calculator during an exam. You may not use your cell phone as a calculator. You will also need two notebooks: one for class notes and the other for homework. You will do all your homework assignments in a notebook separate for this purpose. At the end of the quarter these notebooks will be collected and will count for a portion of your final grade. Graph paper is available in the book store; you will find it useful particularly in Chapters 5 and 9. All exams and entrance / exit questions must be done in pencil. Work done in pen will lose points. Keep your course handouts, completed tests, and projects in your folder; you will refer to this through-out the course. Index cards are useful for study. Also, you may use one handwritten 3x5 index card with notes in exams.

Tentative Time Line for this Course:

- Week 1 Prologue, exploring your learning style and special interests, forming study groups
Individual project 1 due 4-2: Your learning style and plan for success
- Week 2 Thinking Critically Chapter 1
- Week 3 Approaches to Problem Solving Chapter 2
Exam 1 covers chapters 1 and 2
- Week 4 Numbers in the Real World Chapter 3
- Weeks 5&6 Managing your Money Chapter 4;
some classes will meet in computer lab so we can learn to use Excel
Individual project 2: Taking control of your Finances due 5-3
Exam 2 covers chapters 3 and 4
Group project 1 Credit Card Project due 5-10
Midterm grades will be available and will be based on all work done so far.
- Week 7 Statistical Reasoning Chapter 5
- Week 8 Modeling Our World Chapter 9
Exam 3 May 21 covers chapters 5 and 9
- Week 9 Special Topic: Group presentations of Group Project 2 Week of May 24
This week will begin with small group work on topics from the book that interest you. Each group will put together a presentation on your topic. On Thursday 5-27 and Friday 5-28 each group will give their presentations before the class. These projects will be worth up to 100 points (same as a test grade) and will be graded according to a rubric, which will be distributed.
- Week 10 Review for Final Exam: The final is cumulative. Date and place TBA

Expectations for Class Behavior:

Important requirements for this class are attention and mutual respect. You have chosen to be here, and I respect your presence and desire to learn in this class. You, in return, must respect our presence and the learning process taking place in our classroom. To benefit from class you must pay attention. Please turn off all cell phones when coming to class. Intentional behavior which detracts from the learning environment will not be tolerated. Such behaviors include (but are not limited to) side conversations during lectures, texting, playing music that others can hear, and abusive or obscene language. If your inappropriate behavior involves an item (such as a cell phone) you may be asked to surrender that item for the day. (You may pick it up at the end of class.) If you persist in any inappropriate behavior you may be asked to leave the classroom for the day. If you are asked to leave you are still responsible for the work done that day. In particular, if we have an exit question that day you forfeit the grade on that exit question. Your attention and effort is mandatory to make this class a success.

Your teacher has a learning disability known as face blindness (congenital prosopagnosia.) You can look this up on Wikipedia. This affects about 2% of the population and is similar to dyslexia except that the difficulty is with recognizing faces rather than recognizing written symbols. She will eventually get to know you by your voice and other characteristics; however, it will take longer. Please do not be offended if she fails to recognize you, or if she confuses you with someone else. Because of this learning disability she empathizes with any difficulties you may have in learning this material, and she will do her utmost to help you succeed.

Additional Announcements:

Mathematics is a language. You will learn it in the same way that you learn any foreign language. Practice is essential! This requires time and effort on your part. If you cannot spend the time to practice this language, you will have problems successfully completing this course. Statistics show that the greatest cause of failure is not doing the work and not attending class. The class will move fast and it will be your responsibility to catch up if you should miss.

For Chapter 4, “Managing your Money” some classes may meet in the computer room of Bouillon Hall so that we can explore software for calculating checkbook or credit card plans. This will be announced a few days ahead of time.

Feel free to raise your hand for help during class; as time permits I will answer your questions. If you need more time to clarify your question(s) please schedule an appointment. For the long term your best bet is to form a study group with your classmates and meet regularly during the week (or even on weekends). Take notes! even if you draw pictures, write something down! Reading assignments will be given most days. If you read ahead you’ll find that the day’s work will make more sense.

Attendance and appropriate participation in class is crucial to your success. There will be graded in-class assignments, activities, and quizzes that cannot be made up. It is also expected that your presence will contribute to and never distract from the learning of others in the class. Please see “Expectations for Class Behavior,” above. It is strongly recommended that you read the textbook prior to attending class, and again as you work on your assignments.

Incompletes will be given sparingly, under valid documented circumstances (military obligation, serious illness or accident, etc.). The last day for uncontested withdrawal is May 14. Plan now so that your grade does not threaten your financial aid. If the date of the final presents a problem, consider changing sections

Resources: The *textbook* is the most important resource; read it! Your book contains explanations of all material to be covered in class, and most assignments will be taken from the text. Answers to selected exercises are in the back of your book. Additional help is available in the *University Math Center* in Hertz 101 and through *SmartThinking.Com*. You may also qualify for tutoring through *Academic Achievement Services*. Another resource is your *classmates*. Group studying is recommended; study groups will be organized early on. Class notes and assignments will be posted online on *Blackboard*. Other resources are available *online*; just google the topic we are studying and you will find information. Some good websites are www.purplemath.com and www.sosmath.com. Also there are good tutorials on Youtube. **ASK QUESTIONS!** If you do your homework, you will be able to. Visit the *University Writing Center* (Hertz 101; appointments recommended) for help in getting your writing for your individual and group projects as good as it can be!

Individual and Group projects should be written carefully and free of conceptual, grammatical, and spelling errors. Although this isn’t an English class, the quality of your writing will affect your grade on your projects because one of our goals is to learn to think critically and logically, and clear writing reflects clear thinking. All projects should be typed in 12 pt font, and printed out to turn in. For group projects, one grade will usually be given to all members of a

group. However, each group member should do his / her fair share of the work. In your project report, tell what each group member did. If it becomes apparent that a person did not do his/her share of the work, that person's grade will be reduced.

If you have a request to allow for special learning needs, let me know as soon as possible. Reading the text is important; if you have serious difficulties reading the textbook you may qualify for accommodations through Disability Support Services. Talk with them about what you may need and how you may qualify. Students who have a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Disability Support Services Office and wish to have adjustments in this course should provide me with a copy of the form and discuss their needs with me. Students with disabilities without this form may contact the Disability Support Services Office, Bouillon 205, dssreceipt@cwu.edu, or 963-2171.

Assignments for Week 1:

Homework for this week: read pg 1 – 12 in text. Choose 2 questions from page 12 and answer them in your notebook. Look through your book, particularly the index, applications index, and table of contents, and find something that interests you. Make note of this in your homework notebook. We will come back to this in week 9.

Individual Project 1, 50 points, due Friday April 2:

Visit www.learningstylesonline.com Take the Free Learning Styles Inventory Test <http://www.learning-styles-online.com/inventory> and find out your learning style. Make a printout of the graphical result page which you will produce at that website.

In a written essay, discuss your learning style, your goals for this class, your interests, and your intended major if known. Describe how you have used your learning style in the past to do well in some area that you are interested in. Describe how you will use your learning style to do well in this class. This essay should be about one page, typed in 12 pt, it can be longer if you wish. Have this typed, printed out, and ready to turn in on Friday April 2. This project is worth 50 points. To receive full credit your essay should show that you have put serious thought into this matter. Address all points noted above, use complete sentences and avoid spelling and grammar errors. Include a copy of the results page which was created when you visited Learning Styles Online. Suggestion: Visit the University Writing Center (Hertz 101; appointments recommended) for help in getting your writing for this and other projects as good as it can be!

Your Homework Notebook:

Make a habit from the beginning of doing all of your homework in your notebook. Each assignment should be complete and readable, and should indicate the date, the text page and question numbers. Pencil is recommended; use of ink often creates mess and mental blocks. Also in your homework notebook you may make note of any questions or ideas you may have which are related to the subject. Your homework notebook will be collected at the end of the quarter and will be graded as to how well it follows these guidelines.