MATH 101 — MATH IN THE MODERN WORLD — ONLINE — Winter 2017

Instructor:	Dr. Chris Black
Office:	Des Moines Center, HEC #268
Office Hours:	By arrangement
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Required Text:	*Using and Understanding Mathematics*, Sixth Edition, Bennett & Briggs, Addison Wesley, 2014
Required Materials:	Graphing calculator, such as a TI-83+ or TI-84. Subscription to MathXL (via www.MathXL.com) for online homework and quizzes. There is no course ID needed to enroll in MathXL, You must purchase access either bundled with your text or separately from Pearson..

COURSE DESCRIPTION:

Math in the Modern World takes a practical view of mathematics, stressing the application of mathematics over the development of abstract mathematical concepts. The focus of the course is on developing critical thinking and quantitative reasoning skills which we will develop through traditional homework sets and more investigative projects.

COURSE GOALS: The basic goals of Math 101 include:

- ▷ Becoming familiar with techniques from many branches of mathematics
- ▷ Developing the ability to analyze quantitative information critically
- ▷ Investigating real-world problems creatively
- ▷ Understanding to connections between various mathematical methods
- ▷ Using technology to help solve problems, experiment, interpret results and verify conclusions
- ▷ Determining the reasonableness of solutions
- ▷ Appreciating that the procedure for solving a problem is a important as the answer
- ▷ Communicating knowledge in both everyday and mathematical language

PROBABLE COURSE TOPICS:

- ▷ Numbers in the Real World: percentages, scientific notation, rounding
- ▷ Statistical Literacy: Creating and interpreting tables and graphs
- ▷ Managing Money: interest, compounding, savings, loans
- ▷ Modeling: linear and exponential functions, population growth
- ▷ Voting Theory: Apportionment and voting schemes

Course Expectations:

As as student in this online course, you can expect:

- Collected assignments to be graded and returned within one week. Homework done through MathXL will provide instant feedback.
- Response to email within 24 hours (or less!) Monday to Friday, unless I am travelling which will occur during the quarter. I will also respond to email on weekends, although less frequently.

As a student in this online course, you will be expected to:

- Devote enough time to the course to succeed. Remember this is a 5-credit course..
- Be proactive in seeking help when needed.
- Complete all assignments on time and to the best of your ability.
- Notify the instructor *immediately* of any circumstances impeding your success.
- Adhere to Central Washington University's Student Judicial Code (posted on Canvas), particularly the section on Proscribed Conduct and Academic Dishonesty.

Course Structure:

As an online course, the content will be delivered through Canvas. Your tasks will include the following:

- Read the appropriate section(s) of material from the text.
- Watch the recorded lesson/PowerPoint. Pause the recording to work through examples where indicated and check your understanding.
- After the lesson, work through the worksheet on your own.
- Assess your work on the worksheet by comparing your work to the solution.
- Complete the assigned homework on MathXL.
- If you need help with any of the homework problems, email me. There is a 'Contact the instructor' button in MathXL that will link me directly to the problem in question. I will either handle the questions individually, or I will post a solution on Canvas, depending on how many students are having similar issues.

There will also be three projects to be completed individually during the quarter.

Grading:

Homework (MathXL):	165 points
Quizzes (MathXL):	60 points
Tests (MathXL):	200 points
Projects:	120 points

HOMEWORK:

Daily homework is an integral part of this course. You are responsible for keeping up with the assigned homework on MathXL, and for seeking help when needed. The homework sets will open up a week before the date on the schedule, allowing you to work a little bit ahead in the course. In order to help you master the material, you have three attempts for each homework problem. If you are having difficulty with the homework problems, contact the instructor. The 16 homework sets are worth 10 points each, and the orientation assignment is worth 5 points.

QUIZZES:

There are three quizzes during the course, administered through MathXL. These cover only a few sections of material each. You are allowed two attempts on the 60-minute quizzes, so take notes on any problems you've missed and try them again within the 60-minute window. Quizzes must be taken **on the day specified on the course schedule**: Wednesday 1/18, Monday 2/6, and Friday 2/10. The three quizzes are worth 20 points each.

TESTS:

There are four tests administered through MathXL that assess the concepts in an entire chapter (or two partial chapters) of material. As these are summative assessments, you are allowed only one attempt at each 90-minute test **on the day specified on the course schedule**: Thursday 1/26, Tuesday 2/14, Wednesday 3/1, and Wednesday 3/15 (during finals week). The tests are worth 50 points each.

PROJECTS:

There are 2 lab projects and a mini-project to be done individually, in which you will delve more deeply into real-world applications of the course content. Grammar, spelling and professional presentation count. These projects are significant assessments of your progress toward the goals of the course. For the first two projects, you will receive feedback on the first version of your project report, and you will incorporate this feedback into your final version. Five points are awarded for a *complete* first draft submitted on time (regardless of errors). The final version is then assessed according to the project rubric out of 45 points. The third project is a mini-project that will be submitted only one time and is worth 20 points.

	Project #1	Project #2	Mini-Project #3
Assigned:	W. 1/25	M. 2/13	T. 2/28
First version due:	Th. 2/2	T. 2/21	N/A
Final version due:	F. 2/17	F. 3/10	M. 3/6
Total points:	50	50	20

Late policy: First versions will not be accepted late. Final versions of projects will be accepted up to 5 days late with a penalty of 5 points per day. The mini-project will be accepted up to 2 days late with a penalty of 5 points per day.

Academic Honesty:

Each of us should consider our placement at this institution to be a privilege. We need to have respect for one another, and for ourselves. In light of these facts, cheating in any form will not be tolerated. You are encouraged to consult with each other using the online discussion forums, however anything you turn in with your name on it should have been written by you alone. The word "plagiarize" is defined by Merriam-Webster as "to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source." This is a very serious offense that I absolutely do not tolerate. The first instance of plagiarism results in a score of 0 on that assignment, and the second is grounds for failing the course.

Disability Services:

Students with disabilities may arrange for academic adjustments by providing the instructor with a copy of the "Confirmation of Eligibility for Academic Adjustments" from the Disability Support Services Office as soon as possible. To obtain this form, contact the Disability Support Services Office at the main campus at dssrecept@cwu.edu or (509) 963-2171.