

MTH-120S-002FS

Quantitative Reasoning Syllabus Part 2

Edison State Community College

3 Credit Hours

Professor: Lisa Hartwig
M.Ed.; Bowling Green State University 2009, Graduate Mathematics; Bowling Green State University, Ball State University, University of Phoenix 2020

Email/Phone: ehartwig@edisonohio.edu/937.381.1518

Office: Room 212; MW 9-10am and T/TH 9-10:30am; online as needed

Required Materials: Sobecki and Mercer, *Math in Our World*, 2nd Ed.
AND Aleks Homework card with access code that comes with your book
(YOU WILL WRITE IN THIS BOOK AND TURN PAGES IN)

Homework assignment due dates are located in ALEKS. While these dates follow a pattern, homework is ALWAYS due before you take the test, even if it disrupts the pattern.

Tentative Weekly Schedule (PRINT THIS AND HANG IT ON YOUR REFRIGERATOR)

Week	Day	Tasks
Week 1	Tuesday	Introduction and ALEKS overview
	Thursday	2-1 Review of Percentages
Week 2	Tuesday	2-2 Budgeting
	Thursday	2-3 Simple Interest
Week 3	Tuesday	2-4 Compound Interest
	Thursday	2-5 Installment Buying
Week 4	Tuesday	2-6 Education and Home Loans
	Thursday	2-8 Income Taxes
Week 5	Tuesday	Exam 1
	Thursday	3-1 Basic Probability
Week 6	Tuesday	3-2 Sample Space and Counting Techniques
	Thursday	3-3 Combinatorics
Week 7	Tuesday	3-5 Odds and Expected Value
	Thursday	4-1 Gathering and Organizing Data
Week 8	Tuesday	4-2 Representing Data Graphically
	Thursday	4-3 Measures of Average
Week 9	Tuesday	4-4 Measures of Variation (EXCEL)
	Thursday	4-5 Measures of Position (EXCEL)
Week 10	Tuesday	Exam 2
	Thursday	4-6 Normal Distributions and Z-Scores
Week 11	Tuesday	4-7 Applications of Normal Distribution
	Thursday	4-8 Correlation and Regression Analysis (EXCEL)
Week 12	Tuesday	4-9 Misuses of Statistics
	Thursday	5-2 Graphing Functions

To accommodate the needs of this course, the instructor may alter the syllabus at any time.

Week 13	Tuesday	5-3 Modeling with Linear Functions
	Thursday	5-4 Modeling with Quadratic Functions
Week 14	Tuesday	No Class!
	Thursday	Campus is Closed - Thanksgiving
Week 15	Tuesday	5-5 Linear and Quadratic Regression (EXCEL)
	Thursday	Exam 3
Week 16	Tuesday	Final Exam
	Thursday	

Course Rationale

Quantitative Reasoning can be defined as the application of mathematic skills to analyze and interpret real-world quantitative information in the context of a discipline to draw conclusions that are relevant to students in their daily lives.

Course Objectives

The students will

1. Engage in a meaningful intellectual experience.
2. Increase quantitative and logical reasoning abilities.
3. Improve ability to communicate quantitative and mathematical ideas.
4. Strengthen mathematical abilities that are necessary in other disciplines.

Grade Scale

90-100% A

80-89% B

70-79% C

60-69% D

0-59% F

Grade Weight Allocation

25% Aleks Homework

15% Book Activities/Labs

45% Exams

15% Final Exam

****Weighted grades cannot be calculated by dividing points earned by total points.****

Classroom Courtesy

Put your cell phone away and be sure to set it to silent before class starts. Leave the room if using your cell phone is absolutely necessary in an emergency situation. Refrain from complaining and verbalizing a poor attitude inside the classroom. Conduct yourself in a manner that is conducive to learning. If you behave inappropriately, you will be removed from the class.

Calculator (Required)

A scientific or graphing calculator is recommended for this course. A TI-83/84 model is the recommended graphing calculator. Calculators capable of symbolic manipulation (e.g., TI-89, TI-Nspire, TI Voyage 200, HP-48, HP-50) are prohibited. The instructor may restrict calculator use on any assignment or exam. It is the student's responsibility to learn the button sequence for all calculations for the calculator you choose.

Expectations Outside of Class

Because this is a 3-credit hour, 16-week course, you can expect to spend 9-12 hours per week on assignments, homework, exams, asking questions, and studying. The pace of this course moves very quickly and waiting until the last

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minute can be detrimental to your assignments and grades, due to questions you may have or technology issues. Procrastination is not your friend! If you begin your assignments the day they are due, you are behind.

Class Activities

Class activities must be completed during the allotted class time. Late submissions will not be accepted. As an exception, in the event we run over during class time, class work will be accepted for full credit prior to the start of the next class. If you are late to class in this case, your assignment is late and will not be accepted. For each class activity turned in, I choose five random questions to grade for correctness, while the rest is checked for completeness.

Attendance/Participation

Be on time! It is rude to the instructor and the rest of the class if you are late. If you are absent the day of an activity, you will receive a zero on it. To accommodate, your two lowest class work grades will be dropped from your final weighted average. I do not allow make-up homework or make-up exams, as it is not fair for the rest of the class. No exceptions. If you know you will miss an exam before the exam is given, come see me. You must plan on being here the entire class time, so do not leave early. Do not schedule doctor appointments during class time. If you are late or leave early, it is not fair to the rest of the class who stay the entire time, so you will not receive a grade on the activity for that day. IF CLASS IS CANCELLED, IT WILL BE POSTED IN BLACKBOARD AND EMAILED TO YOU PRIOR TO THE BEGINNING OF CLASS. Please check your email before leaving for class.

Notes

You are expected to take notes on every section covered in class. They will assist you in completing other assignments required for this class.

Homework

Homework due dates are posted in ALEKS on the first day of class. While you will see a pattern with the due dates, be mindful that if an exam comes before a typical due date, then the homework assignment will be due prior to you taking the exam. No late homework will be accepted. To accommodate, your two lowest homework grades are dropped. Online homework assignments will be accessed through our Blackboard course site, and you will be redirected to the ALEKS site. Your homework access code card comes wrapped inside your book, so be sure not to throw it away.

Completing your homework in a timely manner is essential to success in this course. You have access to all the due dates for all the assignments on the first day of class, so plan accordingly. You also have access to all the ALEKS homework assignments after the due date for you to review and study from. Do you typically need extra time on homework assignments? Work ahead and plan accordingly! Procrastination is not your friend. Any homework submitted after the due date will earn a zero in the grade book. Use the resources provided for you in Aleks to help you. You can also email me or utilize tutoring if you have questions. Please allow 24 hours during the week, and up to 48 hours on the weekend for me to respond. See the Academic Dishonesty section below for our institution's cheating policy. *All work must be completed by you and you only.* For technology issues with Aleks, it is your responsibility to contact Aleks Customer Support. Procrastination is not your friend when completing homework, so please work ahead. If you begin your assignments the day they are due, you are behind.

Exams

You will be required to prepare for and take all exams on their scheduled dates and within the allotted class time. You may NOT use your cell phone calculator on any exam. There will be no make-up exams. Most exams are 80-100 points and are graded fully on correctness. You may not use any notes, textbooks, or any other resources while taking your exam. Your final exam will be cumulative. The final exam policies are the same as the unit exams. If you fail to complete the final exam, you will receive a failing grade for the course. At the end of the course, your final grade is your grade. I do not change grades for any reason, including but not limited to athletic eligibility, graduation requirements, etc. Put in hard work and diligence throughout the semester and do not ask me to change your final grade.

Extra Credit

To accommodate the needs of this course, the instructor may alter the syllabus at any time.

There will be no extra credit. Do not contact me and ask if there is anything extra you can do to raise your grade. Here are some suggestions for work you can put in throughout the semester: visit the campus Learning Center for free tutoring, ask when you have questions on the material, arrive on time and do not leave early, turn in your assignments completed, spend a minimum of six hours outside of class time working on the coursework, do not skip any assignments, take detailed notes that will make sense to you when you study, make flash cards to help you remember tough topics and go over them often, do not skip class, use the help of your peers during group work. If you need more ideas, please ask.

Writing Policy

Your written work will be graded not only on its content, but also on your use of language. Organization, clarity, grammar, spelling, and punctuation will be considered when grading.

Academic Dishonesty

Because engaging in dishonest practices undermines the trust that is essential in any social relationship, honesty is expected in all matters. Academic honesty requires that you never submit another's work as your own. You will not plagiarize from a printed source, an electronic source, or another student's work, nor will you have someone else do your work. You will not copy from another student's examination or use a crib (unauthorized notes). You will not avoid the timely completion of work by misrepresenting the conditions that cause you to miss a deadline or an examination. You will not assist another student in any dishonest practice. If you engage in academic dishonesty, you will receive a failing grade for the course. Additionally, students are expected to be familiar with and to uphold all student rights and responsibilities as outlined in the student handbook.

eTutoring and Tutoring Center

All students enrolled at Edison are eligible to receive learning assistance services. Learning assistance services includes in person and etutoring, and both are free to Edison students. Visit <https://www.edisonohio.edu/tutoring-center/> to sign up for etutoring.

ARTIFICIAL INTELLIGENCE RESTRICTIVE POLICY

Students cannot use AI tools such as ChatGPT on exams in this course. All assignments should be prepared entirely by the student. Developing strong competencies in this area will prepare you for a competitive workplace. Therefore, AI-generated submissions are prohibited and will be treated as academic misconduct.

TESTING YOUR FAITH ACT POLICY

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, <https://www.edisonohio.edu/services-support/registration-records>, located in "Forms" and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at <https://www.edisonohio.edu/services-support/student-resources>.