

Course Information

Number:	MS120
Name:	Foundations of Quantitative Analysis (Previously: MS201)
Description:	This course asks students to review fractions, percentages, decimals, word problems, linear functions (creating, graphing, and interpreting) and other mathematical concepts typically encountered in everyday life. The use of technology is incorporated when solving applied problems.
Credit(s):	3
Offered (DAY schedule):	
Instructor Permission Required:	N
Pre-Requisite(s):	

Course Objectives

Upon completion of this course, students will be able to: Solve problems involving whole numbers and negative numbers, applying proper order of operations; Add, subtract, multiply and divide fractions; Apply ratios and rates to solve problems with proportions; Solve percent of increase or decrease and interest problems; Convert units of measurement; Determine area and volume of basic geometrical shapes; Solve linear algebraic problems with one unknown variable



Department of Arts and Science

COURSE NUMBER:	MS 120 Section E	CREDIT HOURS:	3
COURSE TITLE:	Foundations of Quantitative Analysis	OFFICE:	By appt
INSTRUCTOR:	Dylan Foster	OFFICE HOURS:	By appt
EMAIL ADDRESS:	fosterd@thomas.edu		

REQUIRED MATERIALS

MyMathLab Student Access Kit

Calculator – NO cell phones

**Optional – Basic College Mathematics (8th Edition) By: Tobey, Slater, Blair, Crawford

COURSE DESCRIPTION

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COURSE OBJECTIVES

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1. Solve problems involving whole numbers and negative numbers, applying proper order of operations;
2. Add, subtract, multiply and divide fractions;
3. Apply ratios and rates to solve problems with proportions;
4. Solve percent of increase or decrease and interest problems;
5. Convert units of measurement;
6. Determine area and volume of basic geometrical shapes;
7. Solve linear algebraic problems with one unknown variable

COURSE REQUIREMENTS

Tests

There will be three tests given in this course. The tests are designed to demonstrate your knowledge of the concepts that you have learned.

Final

The final will cover new material as well as a cumulative demonstration of concepts learned in the course.

Homework

Homework will be assigned daily. Repetition and self-assessment is the key to learning the basic concepts covered in the course. Occasionally, homework assignments will be turned in for a grade.

Projects

One project will be assigned throughout the course and will be turned in at the end of the semester. This will demonstrate your knowledge of math skills learned through real life situations. This project will account for 10% of your final grade and will be uploaded to Moodle in the assigned format. Late projects will result in a grade of 0.

Attendance/Participation

Because of the nature of this course, class attendance and participation is required and essential. If it is necessary to miss a scheduled class, the student must notify the instructor via email or in person. Any make up work will be allowed at the discretion of the professor and must be done in a timely manner. Failure to contact the instructor or complete the make-up work when assigned will result in a grade of '0' for any assignments that were missed. You will earn a full attendance score (10% of your final grade) with 4 or fewer absences and your score will drop 5 points for each absence after that. Anyone arriving/leaving more than 15 minutes late/early will be marked absent.

**October 10th and 12th we will not meet during the scheduled class time. Online assignments will be given and collected

STUDENT BEHAVIOR POLICY

Lectures are provided to further student's understanding of the material. Students are permitted to use their laptops during class to take notes or make use of the e-text. Student's using their computers for reasons not related to classroom learning may be dismissed from the class.

IMPORTANT DATES

Exam 1 (Chapters 1-3)	9/21
Exam 2 (Chapters 4-5)	10/10
Exam 3 (Chapters 6-8).....	11/14
Final Exam (Chapters 1-10)	TBD
Project	12/7

GRADING SYSTEM

A (94-100) A- (90-93) B+ (87-89) B (83-86) B- (80-82) C+ (77-79) C (73-76) C- (70-72)
D+(67-69) D (63-66) D- (60-62) F (below 60)

Tests (3)	40%
Final	15%
Homework/quizzes	20%
Projects	10%
Attendance	15%

ACADEMIC HONESTY

It is expected that you will make use of any resources available to you as you become proficient in the course objectives. This includes, but is not limited to, obtaining help from reference materials, other members of the class, and tutoring through the Learning Center. Items you submit for evaluation must represent your own work. It is permissible to obtain help from other persons when completing outside assignments, but you should make sure that you are able to reproduce the solution to any problem without assistance.

When taking exams, you may not receive assistance from another person in any way. Calculators will be allowed during exams, however, the use of a cell phone or any other device other than a calculator is not permitted. Any departure from these guidelines will be considered cheating and dealt with according to the procedures outlined in the student handbook.

STUDENTS WITH DISABILITIES

Student's requiring academic accommodations to be successful in this course are encouraged to arrange a meeting with Lisa Deesautels-Poliquin, Vice President for Student Affairs (Ayotte Center, Room AD-127)

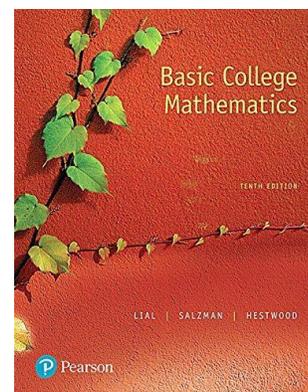
At that meeting, strategies for success will be discussed, as well as any accommodations required for the classroom, which will then be communicated with the instructor.

**MS120****Fall 2018****Class/Time:** AL-228/MWF 8-8:50 a am**Instructor:** Jes Crowell**Office Hours:** By appointment**Office:** AL-124**Office Phone:** 859-1209**E-mail:** crowellje@thomas.edu**Materials**

Basic College Mathematics MyMathLab – Pearson etext with MyMathLab software

Basic College Mathematics (10th Edition) by Lial, Salzman, and Hestwood ISBN 978-0134467795

Calculator – NO cell phones allowed on tests and quizzes

**Course Objectives**

By the end of this course, students will be able to:

- * *Solve problems involving whole numbers and negative numbers, applying proper order of operations*
- * *Add, subtract, multiply and divide fractions*
- * *Apply ratios and rates to solve problems with proportions*
- * *Solve percent of increase or decrease and interest problems*
- * *Convert units of measurement*
- * *Determine area and volume of basic geometrical shapes*
- * *Solve linear algebraic problems with one unknown variable*

Academic Honesty

Each Thomas College student is expected to live and work in our community in keeping with the student handbook which you may request from Student Affairs or find online through the Student Affairs website. Academic honesty essentially means that the work you submit (written, oral, exam, etc.) is your own work produced within the confines of this course. I observe the campus Academic Honesty policy in the student handbook and students found violating the policy may fail the assignment or the course. Cell phone use during exams is not allowed, but you may use a regular calculator – not the calculator function on any electronic device.

Attendance and Participation

I observe a strict class attendance policy. You may have up to four absences; however, any absence diminishes our community of learners. Each absence over 4 will result in 5 points being deducted from your attendance and participation grade. For your sense of community and for your individual development, I encourage you to attend all of the classes and events. If you know you will miss a class, you may see me beforehand with any questions about assignments and make arrangements for submitting any work. Please know that **I do not accept late work unless prior arrangements have been made or in cases of extreme emergencies.** Note: If you must come to class late, making sure that I mark you present is your responsibility. Anyone arriving/leaving more than 15 minutes late/early will be marked absent. I reserve the right to drop a student from the class for lack of attendance or participation.

Americans with Disabilities Act Accommodations

Students with identified disabilities are encouraged to request accommodations if needed. The first step is to contact Lisa Desautels-Poliquin, Vice President of Student Affairs. I am happy to help students understand the self-advocacy process for accommodations, but as an instructor, I can only apply accommodations when I have been officially notified by Student Affairs. If you have questions, please feel free to speak with me or to contact Lisa Desautels-Poliquin directly.

Thomas College Diversity Statement

Thomas College is committed to promoting a diverse community in an atmosphere of mutual respect. We recognize and appreciate diversity in relation to race, color, national origin, religion, sex, sexual orientation, gender identity and expression, veteran status, age, socioeconomic status, and disability. Prominent among the values that define the Thomas College community is civility, which includes mutual respect, fairness, and appreciation of differences. All members of the college are called upon to promote and value this ethic of common respect and civility.

Evaluation

Final grades will be determined based on the following weighting of student work:

In-class assignments and participation	15%
Exams (3)	30%
Final Exam	20%
Homework	20%
Project and reflection	15%

Note: Late work will not be accepted without prior approval or in an extreme emergency.

Brief descriptions of course requirements

In-class assignments and participation

This course requirement will be assessed not only on your attendance in class, but on your participation. Participation indicates that you not only attend but make positive contributions to the class session or event. It is important that we learn from each other, and that we talk through what we are thinking, so that we can share our learning with others.

Exams

There will be three exams in this course. These tests will be designed so that you will be able to demonstrate the concepts that you have learned. This may include synthesizing your learning and using multiple approaches to solving the problem.

Final Exam

The final will cover new material and will also include a cumulative demonstration of concepts that have been learned throughout the course.

Homework

Homework includes daily assignments. I believe that repetition and self-assessment is the key to learning the basic concepts that you will need to know to complete other math courses and/or the math portion of the Praxis exam. Showing your work is crucial to getting full credit on your assignments.

Project and Reflection

A project will be assigned during the course. It will be a way for you to demonstrate your knowledge of a math skill learned through a real-life situation. We will begin to discuss it after the first exam.

Grading System

A (93-100)	B+ (87-89)	C+ (77-79)	D+ (67-68)	F (below 60)
A- (90-92)	B (83-86)	C (73-76)	D (63-66)	
	B- (80-82)	C- (70-72)	D- (60-62)	

Student behavior policy

Lectures are provided to further the student's understanding of the material. Students who are not engaging with the class, but instead are found using chat rooms, playing on the internet, playing games, and/or using other similar diversions are considered to be disruptive to the class environment. This disruptive behavior may result in dismissal from the class and/or course.

Preliminary Schedule of Topics

8/27	Introductions, Syllabus & class overview, & Pretest
8/29	Pretest overview, Chapter 1 Whole numbers – Sections 1.1 & 1.2
8/31	Sections 1.3 & 1.4
9/5	Sections 1.5 & 1.6
9/7	Sections 1.7 & 1.8
9/10	Sections 1.9 & 1.10
9/12	Chapter 2 Fractions – Sections 2.1, 2.2, & 2.3
9/14	Sections 2.4, 2.5, & 2.6
9/17	Sections 2.7 & 2.8
9/19	Chapter 3 Fractions – Sections 3.1 & 3.2
9/21	Sections 3.3 & 3.4
9/24	Section 3.5 & Review
9/26	Review for Exam 1
9/28	Exam 1
10/1	Chapter 4 Decimals – Sections 4.1 & 4.2
10/3	Sections 4.3 & 4.4
10/5	Sections 4.5 & 4.6
10/10	Chapter 5 Ratio & Proportion – Sections 5.1, 5.2, & 5.3
10/12	Sections 5.4 & 5.5
10/15	Chapter 6 Percent – Sections 6.1 & 6.2
10/17	Sections 6.3 & 6.4
10/19	Sections 6.5 & 6.6

10/22	Sections 6.7 & 6.8
10/24	Review for Exam 2
10/26	Exam 2
10/29	Chapter 7 Measurement – Section 7.1
10/31	Sections 7.2 & 7.3
11/2	Sections 7.4 & 7.5
11/5	Chapter 8 Geometry – Sections 8.1 & 8.2
11/7	Sections 8.3, 8.4, 8.5, & 8.6
11/9	Sections 8.7, 8.8, & 8.9
11/14	Review for Exam 3
11/16	Exam 3
11/19	Chapter 9 Algebra – Sections 9.1, 9.2, & 9.3
11/26	Sections 9.4 & 9.5
11/28	Sections 9.6, 9.7, & 9.8
11/30	Chapter 10 Statistics – Sections 10.1 & 10.2
12/3	Section 10.3
12/5	Section 10.4
12/7	Review for Final
Finals Week	Final Exam