

MAT 050: Quantitative Literacy

Basic Course Information

Course Name: MAT 050-606, Quantitative Literacy

Semester: Fall 2017

Credits: 4 credits

Prerequisite: appropriate diagnostic score

Co-requisite: MAT 020 (required lab for students with appropriate diagnostic score)

Meetings/Times: Monday and Wednesday, 5:30pm – 7:20pm

Location: CP 127 (Larimer Campus)

Instructor Information

Instructor: Ray Brown, Adjunct Instructor

Office Phone: (970)226-2500, voicemail #2281

Email: Raymon.Brown@frontrange.edu

Office Hours: Monday, 3:00pm – 5:00pm, MA 600B (Larimer Campus)

College Web Site: www.frontrange.edu

Course Coordinator: Ivan Loy, (970)204-8161, Ivan.Loy@frontrange.edu

Department Chair: Jenny Brinkmann, (970)204-8289, Jennifer.Brinkmann@frontrange.edu

Course Materials

Required: MyMathLab

Students are required to purchase an Access Code for MyMathLab in order to complete the homework assignments for this course. If you purchase a new textbook from the campus bookstore, it will come with an Access Code, but you can also purchase an Access Code directly from the publisher at www.MyMathLab.com.

Required: TI-30XIIS scientific calculator (required in MAT 103, 107, & 108), or
TI-83, TI-83+, TI-84, or TI-84+ graphing calculator (required in MAT 120 & 135)

Optional: *Developmental Mathematics, 3rd edition*, Martin-Gay, ISBN 978-0-321-93687-5

The instructor reserves the right to modify the syllabus and schedule.

Catalog Course Description

Develops number sense and critical thinking strategies, introduces algebraic thinking, and connects mathematics to real world applications. Topics in the course include ratios, proportions, percents, measurement, linear relationships, properties of exponents, polynomials, factoring, and math learning strategies. This course prepares students for Math for Liberal Arts, Statistics, Integrated Math, and college level career math courses.

Statewide Learning Outcomes

This course teaches all of the following competencies, ensuring transferability of this course between all institutions within the Colorado Community College System:

1. Demonstrate knowledge of and the ability to solve problems involving ratios, rates, proportions, percents, and measurement conversions.
2. Demonstrate knowledge and usage of formulas.
3. Demonstrate knowledge of and the ability to solve linear equations and inequalities.
4. Demonstrate knowledge of and the ability to calculate and simplify expressions containing exponents and numeric square roots.
5. Demonstrate knowledge of and the ability to perform algebraic manipulations involving polynomials, polynomial operations, and basic factoring.
6. Demonstrate the use of critical thinking skills to problem solve.

Graded Instructional Activities

Activities	Contribution to Overall Grade
In-Class Activities	5%
Take-Home Assignments	15%
Unit Exams	60%
Final Exam	20%
Total	100%

In-Class Activities

Your instructor will use a variety of in-class activities to help teach or enhance several of the topics covered in this course. These activities may include (but are not limited to) discovery, worksheets, group practice, presentations, quizzes, etc. You are expected to be present in every class in order to benefit from these instructional activities and receive credit for them.

Take-Home Assignments

You will be given a variety of take-home assignments to help you master the concepts taught in this course. These assignments may include (but are not limited to) homework assignments, reflection papers, exam corrections, flash cards, group projects, D2L discussions, etc.

Comprehensive Exams

There will be three 70-minute Unit Exams and a 70-minute comprehensive Final Exam, designed to evaluate your understanding of the material covered in each unit and throughout the course. The dates of these exams are listed in the Course Plan at the end of this document.

If you cannot be present for an exam, you must notify your instructor prior to your absence to be considered for a make-up exam. Make-up exams are offered at the instructor's discretion.

Grading Scale

Letter Grade	Range
S/A	90 – 100%
S/B	80 – 89%
S/C	70 – 79%
U/D	60 – 69%
U/F	Below 60%

Note: Students must earn a minimum grade of 70% (S/C) in MAT 050 in order to meet the prerequisite requirements for enrollment in MAT 103, MAT 107, MAT 108, MAT 120, MAT 135, and MAT 155.

Late Work

Late work is accepted only at the instructor's discretion. The Math Department will support each instructor's choice to either accept or not accept late work from students.

Extra Credit

No extra credit opportunities will be offered in this course. Since math courses are sequential, it is important that all required concepts are mastered to earn a passing grade and continue on.

Student E-mail

All students must activate their FRCC student e-mail accounts in order to receive important information from the instructor and the institution. Visit the FRCC website for instructions.

Cell Phones

Cell phones can be a distraction in the classroom. To help all students focus and participate at their full potential, all cell phones should be silenced and stored out of sight during class.

Two-Hour Rule

For a typical college course, you should expect to spend two hours outside of class for each hour spent in class. For this fall MAT 050 class, this equates to around 7 hours of work outside of class per week. This is a reasonable rule of thumb for students who have a good command of the prerequisite skills and who use effective study strategies. Some students may need to spend more time working outside of class in order to be successful.

Attendance and Participation

Students are expected to attend every class, arrive on time, and stay for the entire class. To get the most out of each class, you should think seriously about questions and concepts presented and contribute actively and constructively to class discussions and activities. Students are responsible for recognizing when they need help, and for seeking help when needed.

Non-Attendance

Any student who does not physically attend a class (or complete an academic assignment) by August 28th will be dropped from the class. If a student is dropped for non-attendance, and wishes to re-enroll in a course, he or she must apply through the late-add appeal process.

Non-Payment

Any student who has not paid for a class by August 30th will be dropped from the class. If a student is dropped for non-payment, he or she will not be able to re-enroll in the class.

Note: Monthly deferred payment plans are available through eWolf.

Math Help Center

If you have questions on your homework or difficulty understanding a particular concept, the Math Help Center has tutors on staff who can help answer your math questions for free. The MHC is located in the Mount Antero building, rooms 353 and 355. The schedule of tutors and hours of operation are displayed on the bulletin board at the back of your math classroom.

Math Help Center Director: Carla Alejos, (970)204-8242, Carla.Alejos@frontrange.edu

Disability Support Services

Academic accommodations are available for students with documented disabilities. If you have a documented disability (whether learning, physical, medical, or psychological) and require academic accommodations, please contact a Disability Support Services Coordinator.

DSS Coordinator: Nancy Elliot, (970)204-8609, Nancy.Elliot@frontrange.edu

DSS Coordinator: Britt Otter, (970)204-8606, Brittany.Otter@frontrange.edu

Recording Lectures

Except where a student is entitled to make an audio or video recording of class lectures and discussions as an academic accommodation, determined through his or her interactive process with Disability Support Services, a student may not record class lectures or discussions, unless:

1. written permission from the class instructor has been obtained, and
2. all students and guest speakers have been informed that audio/video recording may occur.

A student who has been granted permission to record class lectures may use the recording only for his or her own study, and may not publish the recording on YouTube or any other medium or venue without the instructor's explicit written authorization.

Financial Aid

Financial aid recipients are required to meet certain academic standards. Non-attendance, dropping courses, withdrawing from courses, repeating courses, academic progress, and the number of credit hours attempted and completed can affect a student's financial aid eligibility. You are encouraged to seek financial aid advising with questions regarding your eligibility.

Financial Aid Office: (970)204-8376, askfa@frontrange.edu

Financial Aid Scholarship Coordinator: (970)204-8291

Student Code of Conduct

FRCC students have certain rights and responsibilities, outlined in the Student Code of Conduct, www.frontrange.edu/conduct. All students are responsible for knowing and adhering to the code of conduct to help ensure the best possible learning environment for everyone.

Title IX Responsibilities

If you encounter sexual harassment, sexual misconduct, sexual assault, or discrimination based on race, color, religion, age, national origin, ancestry, sex, sexual orientation, gender identity, or disability, you are encouraged to report it. Further information can be found online at:

www.frontrange.edu/being-a-student/campus-safety/report-a-concern-or-incident

FRCC instructors have an obligation to report certain issues relating to the health and safety of campus community members. Instructors must report to the appropriate college officials any allegation of discrimination or harassment. Sexual misconduct (which includes sexual harassment, non-consensual sexual contact, non-consensual sexual intercourse, and sexual exploitation) is considered a form of discrimination. In addition to reporting all discrimination and harassment claims, instructors must report all allegations of dating or domestic violence, child abuse or neglect, and/or credible threats of harm to yourself or others.

Such reports may trigger contact from a college official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. For a confidential discussion, or for more information, contact the **Title IX Compliance Officer**: Paul Meese, (303)678-3707, Paul.Meese@frontrange.edu

Students of Concern

Front Range Community College provides a resource for faculty, staff, and students to report their concern about the well-being of any member of the FRCC community. If you are concerned about yourself or someone else, please file a report of concern at

www.frontrange.edu/care.

Important Dates

First Day of Class: August 21st, 2017

Labor Day: September 4th, 2017

Fall Break: November 20th, 2017 through November 24th, 2017

Last Day of Class: December 11th, 2017

Non-Attendance Reporting Deadline: August 29th, 2017

Payment Deadline: August 30th, 2017

Last Day to Drop with Refund: September 6th, 2017

Last Day to Withdraw: November 19th, 2017

Course Plan

Week	Date	Topic
<i>Week 1, Session 1</i>	08/21/17	Syllabus, MyMathLab, Order of Operations (Section 1.9)
<i>Week 1, Session 2</i>	08/23/17	Review of Fractions (Chapters 2, 3, 4)
<i>Week 2, Session 1</i>	08/28/17	Ratios, Rates, and Proportions (Section 5.1)
<i>Week 2, Session 2</i>	08/30/17	The U.S. Customary Measurement System, Dimensional Analysis
<i>Week 3, Session 1</i>	09/04/17	Labor Day – No Classes
<i>Week 3, Session 2</i>	09/06/17	The Metric System, Conversion Between Systems
<i>Week 4, Session 1</i>	09/11/17	Area, Perimeter, and Volume (Sections 6.3, 6.4, 6.5)
<i>Week 4, Session 2</i>	09/13/17	Exponents and Expressions (Section 8.2)
<i>Week 5, Session 1</i>	09/18/17	Simplifying Expressions (Section 8.7), Review for Exam #1
<i>Week 5, Session 2</i>	09/20/17	Exam #1
<i>Week 6, Session 1</i>	09/25/17	Addition and Multiplication Properties of Equality (Sections 9.1, 9.2)
<i>Week 6, Session 2</i>	09/27/17	Solving Linear Equations (Section 9.3)
<i>Week 7, Session 1</i>	10/02/17	Applications with Linear Equations (Section 9.4)
<i>Week 7, Session 2</i>	10/04/17	Percent Problems (Sections 5.2, 5.3, 5.4/5.5)
<i>Week 8, Session 1</i>	10/09/17	Applications of Percent, Increase/Decrease (Sections 5.6, 5.7, 5.8)
<i>Week 8, Session 2</i>	10/11/17	Formulas, Solving Linear Inequalities (sections 9.5, 9.6)
<i>Week 9, Session 1</i>	10/16/17	The Rectangular Coordinate System (Section 10.1)
<i>Week 9, Session 2</i>	10/18/17	Graphing Linear Equations, Intercepts (Sections 10.2, 10.3)
<i>Week 10, Session 1</i>	10/23/17	Slope (Sections 10.4, 10.5), Review for Exam #2
<i>Week 10, Session 2</i>	10/25/17	Exam #2
<i>Week 11, Session 1</i>	10/30/17	Writing Equations of Lines (Section 10.5)
<i>Week 11, Session 2</i>	11/01/17	Exponents (Section 12.1)

Course Plan (continued)

Week	Date	Topic
Week 12, Session 1	11/06/17	Negative Exponents, Scientific Notation (Section 12.2)
Week 12, Session 2	11/08/17	Adding and Subtracting Polynomials (Sections 12.3, 12.4)
Week 13, Session 1	11/13/17	Multiplying and Dividing Polynomials (Sections 12.5, 12.6, 12.7)
Week 13, Session 2	11/15/17	Factoring Polynomials: GCF and Grouping (Section 13.1)
	11/20/17	Fall Break – No Classes
	11/22/17	Fall Break – No Classes
Week 14, Session 1	11/27/17	Factoring Trinomials: $x^2 + bx + c$, Special Forms (Sections 13.2, 13.5)
Week 14, Session 2	11/29/17	Review for Exam #3
Week 15, Session 1	12/04/17	Exam #3
Week 15, Session 2	12/06/17	Review for Final Exam
Week 16, Session 1	12/11/17	Final Exam

MAT 050-606: Syllabus Addendum

Pre-Chapter Tests

Before starting the homework from each chapter, students should take the Pre-Chapter Test. Pre-Chapter Tests are completed online through MyMathLab, within a time limit of 60 minutes. While no scores are recorded for Pre-Chapter Tests, they can reduce the number of homework problems a student will be required to complete throughout the chapter, by giving the student credit for any problems they proved mastery over in the Pre-Chapter Test.

Homework Assignments

For each section covered in class, students must complete a Homework Assignment to practice and learn the concepts in the section. Homework Assignments are completed online through MyMathLab, and can be worked as many times as needed in order to master the material. Students must earn a score of 60% or better on each Homework Assignment in order to release Chapter Quizzes and Post-Chapter Tests for further progress in the course.

Chapter Quizzes

Throughout each chapter, students will be required to take Chapter Quizzes, designed to ensure mastery of the concepts being practiced and learned. Chapter Quizzes are completed online through MyMathLab, and students must earn a score of 70% or better in order to release the next round of homework assignments in MyMathLab.