



The mission of Concord University is to provide quality, liberal arts based education, to foster scholarly and creative activities and to serve the regional community (<http://www.concord.edu/academics/>).

Course Prefix, Number and Title: MATH 103L College Algebra Support

Course CRN # and Section: 20191 Math 103L Section 30

Semester Taught: Spring 2019

Professor: Melissa M. Lawson

Credit Hours: 0

Office Location: W31

Prerequisites: Math 103L: Mathematics ACT less than 19 or Mathematics SAT less than 490
- *Corequisite:* Students enrolled in Math 103L are required to enroll in Math 103C also.

Office Hours: Tuesday 3:00-4:00
Thursday 3:00-4:00

Course Time: Tuesday 5:30-6:20

Email: mlawson@concord.edu

Building and Room Number: W35

Phone: (304) 384-5614

Office Fax: (304) 256-0276

College/Department Website:
<http://math.concord.edu>

Course Description/Rationale: Polynomial, rational, exponential, and logarithmic functions. Graphing functions, operations with matrices, sequences, series, permutations and combinations included. The course is a general mathematics course for all students. It is required of students in Math 103 with a score of 18 or lower on the math ACT or the SAT equivalent.

Course Management System <http://moodle.concord.edu> will be where online materials are posted for this course. Online quizzes as well as your grades on assignments will be posted there. You use your Concord username and password to login into Moodle. Your grades are recorded in Moodle. It is your responsibility to ensure the professor has entered these grades into Moodle correctly. If there is an error or discrepancy, you must contact the professor before the last day of class.

Hardware/Software Needed: The student will need access to the internet for Moodle. The student will also need a cheap scientific calculator (For example a Texas Instruments TI-30X-A). Cell phones and calculators which can do symbolic mathematics or graphing are not allowed during tests or quizzes.

Cell Phones will not be allowed out during a quiz or test. If a student must have their cell phone out during class, it must be on silent.

Text requirements: Algebra and Trigonometry from OpenStax, ISBN 1938168372, www.openstax.org/details/algebra-and-trigonometry. Paper copies are available but not required for the course.

Concord University Educational Goal(s)

Skills 1, 2, 4, 6 Knowledge 4, 7 Attitudes 7

National Standards

Addresses, at least in part, the following national standards:

NCTM 1a: A.1.1, A.1.3, A.2.1-2.4, B.1.1, B.1.3, B.2.1-2.4, 2a, 2b, 2c, 2d, 2e

Specific Learning Outcomes

Students will be able to solve problems involving linear, absolute value, quadratic, polynomial, exponential, rational, logarithmic, piecewise, and radical functions.

Course Requirements

- Foundations of Algebra
 - The real number system
 - Algebraic expressions and polynomials
 - Factoring
 - Rational expressions
 - Integer and rational exponents
 - Complex numbers
- The Concept of Functions
 - Functions, including domain, range, and function notation
 - Algebra of functions and composite functions
 - Inverse functions
- Mathematical Applications to Problems
 - Linear and quadratic word problems in one variable
 - Exponential and logarithmic word problems
- Solving Equations and Inequalities in One variable using Multiple Representations
 - Including linear, quadratic, and absolute value equations and inequalities
- Graphing Equations and Functions
 - Cartesian coordinates, including distance and midpoints
 - Intercepts and symmetry
 - Basic graphs and transformations
 - Properties, including even/odd, increasing/decreasing, and extrema
- Lines, Parabolas, and Circles
 - Graphs, equations, and properties
- Higher Order Polynomials, Rational, Radical, Absolute Value, Exponential, and Logarithmic Functions
 - Solving polynomial, rational, radical, absolute value, exponential, and logarithmic equations
 - Properties of polynomial, rational, radical, absolute value, exponential, and logarithmic functions
 - Graphing polynomial, rational, radical, absolute value, exponential, and logarithmic functions
- Linear Systems

- Solving systems of equations by graphing, substitution, eliminations, and matrices
- Applications of linear systems

Grading Policy and Scale, Make-up Policy, Late Work

The grading scale is as follows

A	90%-100%
B	80%-89.9%
C	70%-79.9%
D	60%-69.9%
F	0%-59.9%

The course grade is calculated from:

Homework	Average (in percent) x 10%
Quizzes	Average (in percent) x 20%
Tests	Average (in percent) x 30%
Final Exam	Average (in percent) x 20%
Attendance	Days in attendance percent (days attended/days of class) x 20%

*Lack of attendance will result in a one letter grade deduction from your final grade.

Quizzes: Quizzes will be given on random days at the beginning of class. They will be timed. The problems on the quizzes will be taken from past homework assignments from the book. Missed quizzes can only be made-up during office hours if there is a valid excuse (i.e., doctor excuse, school required activity). Missed quizzes must be made up within one week of the student's return to class.

Tests: There will be a test given at the end of each chapter. The tests will consist of questions similar to the homework problems.

Homework: Homework problems will be distributed on printed sheets to the students and will be available on Moodle as pdf files. The student will put the student's answer to each homework problem in the space provided on the sheet for the given problems. The student will turn in the homework sheets at the beginning of class on the date the homework is due. The student will not be allowed to turn in homework at a later time during class. If you are going to be absent during class in which the homework is due for any school related reason or other reason you have knowledge of ahead of time, you must turn in the homework before the class you will be missing to be eligible for credit on the homework. Late work will not be accepted for missing class without a valid excuse.

Book assigned problems and examples from the book will be used as a question bank for quizzes. It is important that students be able to work all the problems assigned from the book. Only odd numbered problems will be assigned from the book so that the student can check the student's answers.

Late Work: Late work without a valid excuse will not be accepted.

Makeup Work: Makeup work is expected the day the student returns to class unless the student had prior knowledge of the absence. Then the work will be expected before the class you are missing.

Course Timeline

Date	Topic(s)
January 15	Rationalizing Denominators
January 22	Factoring
January 29	Distance, Midpoint, Slope, Graphing
February 5	Complex Number Rules
February 12	Substitution
February 19	Absolute Value
February 26	Equations
March 5	Graphing Quadratics
March 19	Graphing Polynomials
March 26	Exponential Functions
April 2	Logarithmic Functions
April 9	Systems
April 16	Matrices
April 23	Probability
April 30	Review

Accessibility/Accommodations:

Concord University is committed to responding to the needs of students with disabilities as defined by the Americans with Disabilities Act. Please inform your instructor at the beginning of the class semester if you have a disability and are requesting accommodations. It is your responsibility to self-disclose that you are requesting accommodations. The University and instructor will provide you with a reasonable accommodation. You should register with CU's Disability Services Office, located in the Athens campus Jerry and Jean Beasley Student Center, Bottom Floor, across from the Campus Post Office. The Disability Services Office phone is 304-384-6086 or you can email the Director, Nancy Ellison, at nellison@concord.edu for assistance.

Academic Dishonesty

Academic dishonesty is morally unacceptable as well as destructive to the learning and teaching atmosphere. Academic dishonesty includes the giving or receiving of improper help on examinations or assignments, falsifying documents, and plagiarism (the act of stealing and using, as one's own, the ideas or the expression of the ideas of another). Such dishonesty can lead to a variety of penalties — including but not limited to failure of assignment, failure of course, loss of institutional privileges, or dismissal from the University. (See University Catalog Academic Policies and Procedures.)

Concord University Honor Code

A Concord University Honor Code was approved by students, staff, faculty, administration, and the CU Board of Governors. The Code states:

"As a member of the Concord University Community I will act with honesty and integrity in accordance with our fundamental principles and I will respect myself and others while challenging them to do the same."

The Honor Code is intended to unite the Concord community behind a culture of honesty, integrity, and civility.

Class/Online Attendance Policy

Regular class attendance is part of a student's academic obligation at Concord. Irregular attendance may affect academic performance adversely and is detrimental to the atmosphere of a class. (See University Catalog Academic Policies and Procedures.)

Emergency Alert System

In an effort to increase safety and security on our campus, Concord University encourages everyone to register for instant text message alerts. Alerts will only be used for security and safety notices. All students, faculty, and staff are eligible to receive text message alerts on their cell phones or email alerts. Please contact the IT Help Desk for further assistance (304-384-5291).

Emergency Information

Emergency/courtesy telephones are located at the main entrance of each residence hall and at various other locations on campus. Emergency telephones can be identified by the flashing blue light and will provide the user with a direct link to Public Safety at the press of a button. To report an on-campus emergency, call 304-384-5357 or 911. The Office of Public Safety is located on the bottom floor of the Rahall Technology Center. For further emergency information go to:
<http://www.concord.edu/administration/office-public-safety>.

Inclement Weather Policy

As a general policy, the University will remain in normal operations during adverse weather conditions. In the event of severe weather conditions, the following may occur:

University Closure

No students or employees are to report.

Classes Cancelled

Students do NOT report BUT employees are expected to report to work at their normal time.

Operating on an Inclement Weather Delay

Under this schedule, all 8 a.m. classes will start at 10 a.m. Students and faculty will follow the Inclement Weather Schedule. (See <http://www.concord.edu/emergency-alerts> for Athens/Beckley Inclement Weather Schedules.)

**Announcements invoking the late schedule or other options referenced above are aired on area radio and television stations and are sent as text and email messages to those enrolled for this service.*

Student Conduct

In classrooms, online, laboratories, and during any activities that are part of course requirements, students are expected to observe reasonable rules of conduct.

Sexual Harassment & Assault

Federal law, Title IX, and Concord University policy prohibits discrimination, harassment, and violence based on sex and gender (Including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If you or someone you know has been harassed or assaulted, you can receive confidential counseling support through the Concord University Counseling Center (304-384-5290). Alleged Violations can be reported non-confidentially to the Concord University Title IX Coordinator at 304-384-6327 or titleix@concord.edu. Reports to Campus Security can be made at (304-384-5357). As an employee at Concord University, I am a mandatory reporter which means I must report any sexual misconduct I am made aware of. This includes verbal or written (such as in an assignment) disclosures of sexual harassment or sexual assault.

Technology Services

Contact the CU Help Desk at extension 5291 from campus or 304-384-5291 off campus. You may also e-mail cuhelpdesk@concord.edu.

Syllabus Disclaimer

"This syllabus is subject to change based on the needs of the class. Please check it regularly."

Miscellaneous:

The only way to study for mathematics is to practice working the problems.

- Walk-in tutoring will be available at the Erma Byrd Center. Watch for a posted schedule.
- Tutoring is available in Athens from math students in S108 (free); look for a posted schedule.
- Walk-in tutoring and one-on-one tutoring are (freely) available in Athens from Student Support and the Academic Success Center. Individual tutors fill up fast, so ask early. Look for flyers for walk-in times or see <https://apps.concord.edu/tutoring/>
- Online tutoring is available (also free) through SmartThinking; login into MyCU for information.