



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/>).

Math 103L College Algebra Review

MATH 103L, CRN 20190, Section 01, M 11:00 – 11:50, SCIEN 103

MATH 103L, CRN 20310, Section 02, W 11:00 – 11:50, SCIEN 103

Semester Taught: Spring 2019

Credit Hours: 0

Prerequisites: None

Professor: D. Becker

Office Location: SCIEN 100-D

Office Hours: MW: 1:00 – 2:00

R: 11:00 – 12:00, F: 12:00 – 2:00

Email: beckerdl@concord.edu

Phone: 304-384-6247

Website: <https://www.concord.edu/nsmh/>

Course Description/Rationale:

Polynomial, rational, exponential, and logarithmic functions. Graphing functions, operations with matrices, sequences, series, permutations and combinations included (From Catalog)

Rationale: This course is a general mathematics course for all students. It is required for students taking upper level mathematics courses, many science majors, and elementary education majors.

Course Management System (Blackboard/Moodle or other systems):

n/a

Hardware/Software Needed:

The student will 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 and quizzes.

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

Learning Outcomes:**Course Objectives: An algebraic, graphic, and numeric approach to the study of:**

- 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 and 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 polynomial, 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
- Probability
 - sequences, series, permutations and combinations

Course Requirements:

You are required to attend class and participate. Failure to meet requirements may lower your final grade in MATH 103C by a full letter grade.

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 nellision@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 (304-3845290). 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 (304384-5357). 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."