

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 101 & 101C General Mathematics

MATH 101, CRN 20181, Section 01, TR 9:30 – 10:45, SCIEN 101

MATH 101C, CRN 20182, Section 01, TR 9:30 - 10:45, SCIEN 101

Semester Taught: Spring 2019 Professor: D. Becker

Credit Hours: 3 Office Location: SCIEN 100-D

Prerequisites: None 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:

A survey course including selected topics from problem solving, set theory, consumer math, and algebra. <u>For MATH101C, a mandatory co-requisite (MATH 101L, General Mathematics Review) is required</u> for successful completion of this course).

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

n/a

Hardware/Software Needed (include privacy policies, if applicable):

Standard scientific calculator.

Text requirements:

Mathematical Ideas by Miller et al. ISBN: 978-0-321-97707-6

Concord University Educational Goal(s):

Skills: (1) Effective inter-communication skills and literacy adapted as needed for the demands of various kinds of discourse

(2) An ability to employ appropriate observational, logical, analytical, computational, creative, and critical thinking skills within and across academic disciplines; and to apply these skills in problem-solving

National Standards:

- A.1.1 Structure, properties, relationships, operations, and representations including standard and non-standard algorithms, of numbers and number systems including integer, rational, irrational, real, and complex numbers
- A.1.2 Fundamental ideas of number theory divisors, factors and factorization, primes, composite numbers greatest common factor, least common multiple.
- A.2.1 Algebraic notation, symbols, expressions, equations, inequalities, and proportional Relationships.
- A.3.1 Core concepts and principles of Euclidean geometry.

Learning Outcomes:

- 2.1 Symbols and Terminology
- 2.2 Venn Diagrams and Subsets
- 2.3 Set Operations and Cartesian Products
- 2.4 Surveys and Cardinal Numbers
- 4.3 Conversion between Number Bases
- 6.1 Real Numbers, Order, and Absolute Value
- 6.2 Operations, Properties, and Applications of Real Numbers
- 6.3 Rational Numbers and Decimal Representation
- 6.4 Irrational Numbers and Decimal Representation
- 6.5 Applications of Decimals and Percents
- 7.1 Linear Equations
- 7.2 Applications of Linear Equations
- 7.3 Ratio, Proportion, and Variation
- 7.4 Linear Inequalities
- 7.5 Properties of Exponents and Scientific Notation

- 7.6 Polynomials and Factoring
- 7.7 Quadratic Equations and Applications
- 8.1 The Rectangular Coordinate System and Circles
- 8.2 Lines and Their Slopes
- 9.1 Points, Lines, Planes, and Angles
- 9.2 Curves, Polygons, and Circles
- 9.3 Perimeter, Area, and Circumference
- 10.1 Counting by Systematic Listing
- 10.2 Using the Fundamental Counting Principle
- 10.3 Using Permutations and Combinations
- 11.1 Probability and Odds

Course Requirements:

Successful completion of learning outcomes stated above and evaluated on a mid-term exam and final given during the course of the semester.

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

The grading scale is as follows:

$$0 - 61 \longrightarrow F$$

The final numerical score will be determined by average of tests, exam, and any other assignments given by the instructor.

At least 2 Tests and 1 Final Exam. All tests are weighted the same.

Late Work: Any assignment missed without prior arrangements will not be accepted after the next class meeting.

Spring 2019 Final Exam Schedule: Thursday, May 9th 2019, 9:00 – 11:15

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 nellsion@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."