

Nashville State Community College
Science, Technology, Engineering and Mathematics
Mathematics

2018 Master Course Syllabus

MATH 1630 FINITE MATHEMATICS

(This master course syllabus template is a general guide for providing an overview of each course offered at Nashville State. Each instructor will further clarify specific criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her individual course syllabus. Prompts for individual adaptations are italicized and in parentheses; faculty should remove or replace these prompts when creating master syllabi and their own individual syllabi if they have not been removed previously.)

Course Information:

Course Title: MATH 1630-XXX, Finite Mathematics

Credits: 3 credits

Class Hours: 3 classroom hours

Course Description:

An introduction to mathematical topics applicable to a variety of academic areas. Topics include linear functions and graphs, linear inequalities and graphs, systems of linear equations, matrices and matrix algebra, linear programming, set theory, logic, and conversion between binary, decimal, and hexadecimal. **Prerequisite(s):** Level 2 placement in Math or concurrent enrollment in MATH 0845.

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Required Textbook(s) & Other Materials: (Students must check with the Instructor before purchasing any materials.)

Textbook(s): *Finite Mathematics, 11th ed.*, by Lial, Greenwell and Ritchey plus MyMathLab Access Code.
Publisher Pearson ISBN: 0-133-86447-2

OR

Access Code: MyMathLab Access Code only ISBN 0-321-19991-X. It can be purchased from the bookstore or from Pearson website directly with a credit card or debit card. An e-textbook is included in the online software.

Textbook only: *Finite Mathematics, 11th ed.*, by Lial, Greenwell, and Ritchey. Publisher: Pearson **ISBN: 0-321-97943-5**

Supplies: TI-83/84 (plus) graphing calculator

Once enrolled, all students should verify that they have the correct textbook and materials information by consulting the D2L/NS Online shell for the course. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nsc.edu.

Course Outcomes:

Upon successful completion of this course, students should be able to complete the following Course Competencies:

Course Competencies:

The following are detailed course competencies intended to support the course outcomes:

1. Solve problems using mathematics, and determine if solutions are reasonable.
 - a. Solve applications of set theory and logic and determine if the solutions are reasonable.
2. Apply mathematical concepts to solve real-life problems using formulas (deduction) and interpret the meaning of the solution.
 - a. Use systems of equations and linear programming to solve application problems and interpret the meaning of the solution.
3. Construct meaningful connections (transfer of knowledge) between mathematics and other disciplines.
4. Apply technology for mathematical reasoning and problem solving.
 - a. Use technology to perform matrix algebra, solve systems of equations, and solve applications problems.
5. Analyze data/graphs by using mathematical modeling and/or statistical reasoning.
 - a. Analyze linear functions and graphs by using mathematical modeling.

Topics to Be Covered:

Number bases (not in textbook)

Arithmetic with Number Bases

1.1 Slopes and Equations of Lines

1.2 Linear Functions and Applications

2.1 Solution of Linear Systems by the Echelon Method

2.2 Solution of Linear Systems by the Gauss-Jordan Method

2.3 Addition and Subtraction of Matrices

2.4 Multiplication of Matrices

2.5 Matrix Invers

3.1 Graphing Linear Inequalities

3.2 Solving Linear Programming Problems Graphically

3.3 Applications of Linear Programming

7.1 Sets

7.2 Applications of Venn Diagrams

6.1 Statements

6.2 Truth Tables and Equivalent Statements

6.3 The Conditional and Circuits

6.4 More on the Conditional

6.5 Analyzing Arguments and Proofs

6.6 Analyzing Arguments with Quantifiers

Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge, and skills:

4 Unit/Module Tests: 150 points each (600 points total)

MyMathLab Homework and Quizzes: 100 points each (200 points total)

Final Exam (comprehensive) 200 points

Grading Policy:

Late Work Policy & Make-up Procedures for Missed Assignments and Work:

There will be 4 tests and a final exam for this course. Tests will not be administered after the test date. If a test is missed, the final exam for the course will count double. If any additional tests are missed, the student will receive a zero on the tests. A student that completes all tests, but scores poorly on one test, can replace that test grade by the final exam grade, provided the final exam grade is higher than the lowest test grade. Homework and Quizzes are completed in MyMathLab. Homework and quizzes are due on the day of the relevant test, usually at the moment that test starts. **Late work will not be accepted – no exceptions. There is no extra credit in this course.**

Attendance Policy

Students are expected to attend all scheduled classes and laboratories. Absences in a course may affect a student's final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student's final grade.

Per TBR policy, a student who does not officially drop or withdraw from a course, but receives a failing grade, will receive an "FA" if the last day of attendance was earlier than two-thirds into the part-of-term. That date equates to the last day to withdraw from the course. The last day for a student to withdraw from a course is XXX day/date XXXX.

In online courses, attendance is signaled by logging on to the D2L/NS Online shell, participating as prompted (e.g., responding to an instructor's email, posting to a discussion board) and/or completing and submitting assignments. Campus closures do not affect attendance and assignment completion in online courses.

(Each instructor will provide policy, especially how attendance influences student assessment and grading.)

Grading Scale:

Letter Grade	Point Range
A	900 – 1000
B	800 – 899
C	700 – 799
D	600 – 699
F	0 - 599

FA

According to NSCC policy, if a student fails a course, but has not officially withdrawn from the course, and her/his last date of attendance is before the last date to withdraw (*use date appropriate to your section*), the student will receive a grade of FA (i.e., "Failure for Attendance Reasons").

(While the above statement should appear in all syllabi, faculty are encouraged to make additional statements or provide examples that would clarify the policy for students.)

FN

An FN is awarded to students who never attended class.

Technology Statement

Nashville State's classes are considered to be web-enhanced. Faculty have an expectation that students will use a computer and the Internet to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells. Computers are available for student use at each campus during campus open hours.

D2L/NS Online and myNSCC

It is students' responsibility to check D2L/NS Online course shells for all enrolled courses and myNSCC, including student email, on a regular basis. These are the official communication channels between the college and students, who are responsible for the information communicated through those channels. D2L/NS Online contains specific course information and myNSCC contains information important for other purposes.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act (ADA). If you require accommodations for any courses in which you are enrolled, contact the Access Center at 615.353.3741 or 615.353.3721, or e-mail accesscenter@nsc.edu. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center.

Classroom Misconduct

Nashville State Community College has a zero-tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary measures. Please review the [Nashville State Student Code of Conduct policy](#). Please be aware that children are not allowed in class or to be left unattended on campus.

Academic Misconduct

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. Students are responsible for understanding and abiding by the [Academic Misconduct Policy](#) in the Nashville State Student Code of Conduct. In addition to other possible disciplinary measures that may be applied through regular college procedures as a result of academic dishonesty, the instructor has the authority to assign an "F" or a "zero" for the exercise, paper, or examination, or to assign an "F" for the course. Students may appeal through the appropriate college grade appeal procedures.

(Each instructor will outline his/her expectations for academic integrity and provide individualized information about consequences for academic misconduct.)

Academic Early Alert System

Nashville State Community College uses an Early Alert System to let students know of a faculty member's concern in one or more of these academic areas: lack of attendance, lack of classroom participation, late or missing assignments, and/or poor performance on assignments/tests. *Please note that Early Alerts do not affect a student's academic standing. If you receive an Early Alert email, please see your instructor and your academic advisor as soon as possible.

RAVE Emergency Alert System

Emergency events can happen at any time and Nashville State Community College wants to be able to notify students if and when they occur. For this reason, all students have been enrolled in the free RAVE alert system. If you have not already done so, please log in at <https://www.getrave.com/login/nsc> to confirm and update your contact information and notification preferences. It is critical that your information be correct so that you will receive any emergency notifications. Your RAVE Username is your NSCC email address. If you've never received an email from RAVE with your password, or if you need to reset your password, select "Forgot your password?" and a new password will be emailed to you. Should the RAVE system indicate "user not found", select Register and create your own RAVE account.

Inclement Weather & Campus Closings

Nashville State will use the RAVE alert system to send a text message to students, staff, and faculty about adjusted hours of operation and/or closings at individual campuses. All students should check the Nashville State web site home page at www.nsc.edu for announcements on campus closures, which may vary from campus to campus. Campus closures will also be announced on local television stations. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

Even when campuses are closed, students are still responsible for completing all assigned work. When classes are cancelled, faculty will post online assignments and any additional instructions in the D2L/NS Online course shell. Check D2L/NS Online for a message from your instructor regarding your online assignment requirements. Faculty have discretion over adjusting deadlines or due date for assignments, but students are responsible for completing all assigned work by the due date established by the instructor.

Class Cancellation Policy

If the class is cancelled, the instructor will notify all students by posting in the D2L/NS Online course, e-mailing through D2L/NS Online, and/or by posting a sign on the classroom door. In the event of class cancellation, students must access D2L/NS Online to complete classwork and the assignment that will be posted in the course D2L site.