Nashville State Community College School of STEM Mathematics

Master Course Syllabus

Math 1630 Finite Mathematics

The purpose of the syllabus is to tell you how the course is organized, what the expectations are, and how you will be graded. In addition, there is important information about how the college will operate during severe weather and how the college will communicate with you. The syllabus is not a contract. Instead, it is meant to help you succeed in this course. If any of the content changes during the semester, you will be notified.

Course information:

Course Title: MATH 1630 Finite Mathematics

Credits: 3 Credit Hours
Class Hours: 3 Class 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:

Instructor Zoom Room link:

Required Textbook(s) & Other Materials:

Supplies: TI-83 or TI-84 Calculator

Once you have registered for your courses, you should make sure you have the correct textbook and materials for each course. Before courses begin, you can do this by looking up your courses on the bookstore's website (https://www.bkstr.com/nsccstore/shop/textbooks-and-course-materials) using your A# or by entering your course information. If you are registered with the Access Center and need an alternate format for the textbook and other

course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nscc.edu

Digital Course Materials: These ensure you pay less for your course materials and have easy access through D2L throughout the semester. When you registered for this course, the charge for these materials appeared on your account. If you decide you do not want to purchase the course materials embedded in NS Online, you can opt out of the program **until the end of the second week of classes**. If you opt out, you will be responsible for purchasing the required course materials on your own. For more information, please visit www.nscc.edu/dcm.

Honors Option: Honors credit is available in some classes. If you are interested in participating in the Honors Program, please see your instructor within the first four weeks of class.

Course Outcomes: At the end of the semester, this is what you should know and/or be able to do:

- 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.

Course Competencies:

The following are detailed course competencies, or specific skills or knowledge, intended to help you achieve the course outcomes:

- 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 Inverses
- 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: We will use the following assessments to demonstrate your understanding, knowledge, and skills:

3 Unit/Module Tests: 200 points each (600 points total)
MyMathLab Homework and Quizzes: 100 points each (200 points total)
Final Exam (comprehensive) 200 points

Students who get a 90% or better on all homework assignments in a module will get 3 bonus points on that exam. Students who get a 80% or better on all quizzes in a module will get 2 bonus points on that exam.

Grading Scale:

Letter Grade	Percentage Range
Α	900 – 1000
В	800 – 899
С	700 – 799
D	600 – 699
F	0 - 599

FA

If you stop attending class or if you are in an online class and stop submitting assignments, but do not turn in a withdrawal form by the deadline, you are still enrolled in class. You will be given a grade of FA, which means you have failed due to not attending class and not completing your assignments. Please refer to the current academic calendar available on the Nashville State web site, looking for the date that indicates it is the "Last Day to Earn F for Attendance (FA)." If you stop attending your course after this date, you will receive an F.

FΝ

An FN is awarded if you have never attended your course or done any of the work in an online course.

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

There will be 3 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 who 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 is due roughly once a week. Late homework can be turned in up until the date of the corresponding test, but late homework earns a 10% penalty. Quizzes are due on the day of the corresponding test. **There is no extra credit in this course.**

General Policy

If you have been exposed to COVID-19 or have tested positive, you must email virusinfo@nscc.edu.

- Absences in a course may affect your final grade.
- Tardiness may also affect your final grade.
- You are responsible for all work/tests that occur during any missed course session(s) regardless of reason(s) for absence.
- If you are not well enough to attend a course session (class), you must notify the instructor as soon as possible before the scheduled course time.
 - If you are unable to notify an instructor before the scheduled course time, you
 must contact the instructor as soon as reasonably possible.
- If you have an unavoidable conflict with a scheduled course session, you must notify the instructor before the course session.
 - If you are unable to notify an instructor before the scheduled course time, you
 must contact the instructor as soon as reasonably possible.

For financial aid purposes, **attendance** is measured by participation in the course. Instructors can determine your level of participation in several ways. Some of those ways are:

- continued attendance
- participation in on-ground or virtual class sessions
- participating in D2L as prompted
- responding to an instructor's email
- posting to a discussion board
- completing and submitting assignments

Technology Statement

- All classes at the College are web enhanced. "Web enhanced" means that components
 of the course, such as assignments and online discussions, may be located online in the
 class D2L/NS Online course shell and used in the course, even if the course meets in a
 classroom on ground.
- You must have access to a computer and an internet connection to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells.
- You may also be required to use free video conferencing platforms (examples: Zoom, Teams, etc.) for course sessions and meetings.
- You will be responsible for appropriate dress while on video. This means that you are expected to dress as if you were in a classroom.
- You will be responsible for a distraction free environment while on video. This means that the professor and others in the course should not be able to hear noise in your

- home, such as cell phones, TVs, or barking dogs. The best way to do this is to keep yourself on "mute" until you need to speak.
- You will be responsible for making sure your background is neutral. Keep in mind that students and professors come from all around the world, and you are all a part of our community. Therefore, please avoid having images in your background that may be offensive to your classmates.
- Certain publisher materials, such as textbook figures, may not work on cellphones and may require a laptop or a tablet.
- If you have questions or concerns regarding access to a computer or internet resources, please contact your instructor. Additional information is available on this website: https://www.nscc.edu/current-students/student-online-resources/access-to-internet-and-technology.

Computer Labs

Computers are available for all Nashville State students to use at each campus during open hours. Open computer lab availability may vary from campus to campus.

You should check the NSCC website for current hours of operation.

D2L/NS Online and myNSCC

It is your responsibility to check your email in **both** D2L/NS Online course shells and your @my.nscc.edu (student email) on a regular basis. These are the official communication channels between the college and you. You are responsible for the information communicated through these email channels. D2L/NS Online emails contain specific course information and @my.nscc.edu emails contain important information from college offices, such as Financial Aid.

ADA Compliance Statement

If you need accommodations due to a disability, please do not hesitate to reach out to our Access Center. Disabilities for which you can receive accommodations include documented physical, emotional, and/or learning conditions. Nashville State is committed to supporting your success, and we encourage you to get assistance if needed. 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@nscc.edu.

Classroom Misconduct

Disruptive conduct is not allowed in the classroom. Disruptive conduct is any behavior that prevents students from learning and interferes with the ability of the instructor to teach. This may change from course to course; therefore, your individual instructors will give you guidance on what qualifies as "disruptive conduct" in their courses. 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

You have started this academic journey to prepare for a future career. Because of this, it is important that you learn the materials being presented in your courses. For this reason, cheating, in any form, robs you of your opportunity to learn and master the material that will enable you to succeed in that future career. Nashville State has a clear <u>Academic Misconduct Policy</u> that you are expected to follow. In addition, your instructors will clarify what Academic Misconduct looks like and the consequences for violations in each course that you take. The instructor has the authority to assign an "F" or a "zero" for such violations or for the semester grade.

Academic Early Alert System

If you are not doing well in your course, your instructor may send you an Early Alert through your @my.nscc.edu email. This email will go to your academic advisor and Student Success advisor, as well. If you get an Early Alert, contact your instructor immediately. Instructors send these when they want to help you figure out how to get extra support to pass the course. An Early Alert does not mean that you have already failed the course. Rather, it means you are in danger of failing the course if you do not change your learning strategy. Please use an Early Alert to your advantage and as an opportunity to improve your grade.

RAVE Emergency Alert System

You can log in to this free alert system to receive text messages about emergencies related to NSCC campuses: https://www.getrave.com/login/nscc. The instructions for this are listed below.

- 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.

Student Wellness

Your well-being is important to us. With this in mind, the college has several resources available to provide support when needed:

- Free tutoring: https://www.nscc.edu/current-students/on-campus-resources/learning-center-and-tutoring
- NSCC email, scheduling, online courses, textbooks, tech check out and support, computer labs on campuses, academic advising, financial advising, COVID-19 information and procedures on campuses: https://www.nscc.edu/current-students/student-online-resources

Services that help with bus passes, food, childcare, textbooks, housing, financial counseling, personal counseling, suicide prevention, health insurance:
 https://www.nscc.edu/current-students/on-campus-resources/student-support-services

Equity Statement

We are taking steps to become more aware of the many different needs of students. Faculty, staff and administrators are committed to helping students find ways to meet their needs so that ALL students can reach their goals. Please ask for things you need.

Inclement Weather & Campus Closings

You get notices about campus closings in these places: text messages from RAVE and www.nscc.edu.

Even when campuses are closed, you are still responsible for completing all assigned work. Check D2L/NS Online for a message from your instructor so you do not miss important assignments and due dates, which may change due to the campus closure.

Class Cancellation Policy

Our instructors post messages about cancelling classes in the D2L/NSOnline course shells and/or on the classroom door on campus. These messages can be found in the News and Content section or the Email tab in the online shell. Please check these to be sure that you take advantage of opportunities for learning and points toward your grade.