

**Nashville State Community College**  
**STEM Division**  
**Mathematics**

**2020 Master Course Syllabus – Web Sections**  
**MATH 1710 Precalculus Algebra**

*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 their individual course syllabus.*

This syllabus sets forth the expectations for course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. Students will be notified if any changes are made. Though changes are possible, it is expected that the course will be conducted as described in this syllabus.

**Course Information:**

**Course Title: MATH 1710 Precalculus Algebra**

**Credits: 3 Credit Hours**

**Class Hours: 3 Class Hours**

**Prerequisite(s): Initial Level 2 placement or higher in Math or MATH 1000.**

**Course Description:**

**Course Description:** A traditional course in precalculus algebra. Topics include polynomial, radical, rational, exponential, and logarithmic expressions and equations; polynomial, radical, rational, exponential, logarithmic, and logistic functions, graphs, and their applications; polynomial and rational inequalities and their applications; and inverse functions.

**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.)**

- MyMathLab Student Access Code (Instructor CourseID and high-speed Internet access required; see further required details in DCM, below): 18-week ISBN 9780135834411 (select this one if MATH 1710 is the last math you need for your major/degree); 24-month ISBN 9780135834459 (select this one only if you have a further MATH classes to take, i.e. MATH 1720).

- A graphing calculator is required (TI-84 or TI-83 or TI-83+ are recommended). Calculators like the TI-89 will not be allowed (those with a Computer Algebra System - CAS). The TI-nspire calculator will only be allowed with the TI-84 Plus keypad (during tests).

**STRONGLY RECOMMENDED:**

- Textbook only: Precalculus: Graphs and Models, A Right Triangle Approach, 6th edition, by Bittenger/Beecher Publisher: Pearson; ISBN 9780134179056
- Student Solution Manual only, ISBN 9780134265230

**COMPUTER RESOURCES AVAILABLE:**

- Tutorials: [www.InterActMath.com](http://www.InterActMath.com) (InterActMath) (high-speed Internet access required);
- 'Smarthinking' (online tutoring 24/7, but not associated with this text) is available and accessed through the D2L/NSOnline course shell for this class.
- Graphing Calculator Reference card (available to download under the Content tab in D2L).

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](mailto:accesscenter@nsc.edu).

**Digital Course Materials (DCM):**

To ensure the lowest cost for students, this course includes a materials fee. This means that some or all of the required textbooks and materials for this course are available through your *NS Online* course shell. When you register for this course, the charge will appear 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 September 6th, 2020. If you opt out, you will be responsible for obtaining the required course materials on your own.

**Course Outcomes and Competencies:**

Upon successful completion of this course, students should be able to:

1. Solve problems using mathematics, and determine if solutions are reasonable.  
Solve logarithmic equations and rational inequalities, find the domain of rational functions and logarithmic functions, and find the difference quotient, and determine if the solution/result is reasonable.
2. Apply mathematical concepts to solve real-life problems using formulas (deduction) and interpret the meaning of the solution.  
Create, analyze, and interpret graphs of polynomial, rational, exponential and logarithmic functions.
3. Construct meaningful connections (transfer of knowledge) between mathematics and other disciplines.
4. Apply technology for mathematical reasoning and problem solving.

Solve real-world problems by applying mathematical models using polynomial, rational, exponential and logarithmic functions.

5. Analyze data/graphs by using mathematical modeling and/or statistical reasoning. Use appropriate technology to approximate local (relative) extrema and increasing/decreasing intervals and real zeros of a function.

### **Topics to Be Covered:**

Introduction to graphing, distance formula, midpoint formula; Functions and graphs, domain, applications; Linear functions, slope, applications; Equations of lines, modeling, linear regression; Linear Equations, functions, zeros, applications; Linear inequalities; Increasing and decreasing and constant intervals, relative maxima, relative minima, piecewise functions; Algebra of functions, difference quotients; Composition of functions; Symmetry, even and odd functions; Transformations; Complex numbers; Quadratic equations, functions, zeros, models; Analyzing graphs of quadratic functions; Rational and radical equations; Absolute value equations and inequalities; Polynomial functions, modeling; Graphing polynomial functions; Polynomial division, remainder theorem, factor theorem; Theorems about zeros of polynomial functions; Rational functions; Polynomial and rational inequalities; Inverse functions; Exponential functions and graphs; Logarithmic functions and graphs; Properties of logarithmic functions; Exponential and logarithmic equations; Exponential growth and decay, compound interest, logistic functions

### **Course Assessments:**

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

Students will have a possible of 1000 points in the course. This is the breakdown of the points:

14 Homework Assignments: 10 points each

14 Quizzes: 10 points each

6 Discussions: 10 points each

4 Tests: 125 points each

1 Final: 200 points

The final grade for the course will be based on 1000 points. Note: There are more than 1000 points possible to earn in the course, so extra points are built in.

## Grading Policy:

The grade for the course will be based on unit tests, homework and quizzes, and a final exam determined by the above distribution.

## Class Policies, Late Work Policy & Make-up Procedures for Missed Assignments and Work:

Homework & Quizzes: Interacting with and exposure to the material is the best way to learn mathematics. The homework and quizzes will be assessed through MyMathLab. MyMathLab will be used for drill, practice, and the exposure needed to learn the material. The homework exercises in MyMathLab have tutorial help by choosing "View an Example." In addition, MyMathLab has videos and animation to work with certain problems. You must register for MyMathLab by the end of the first week of class. Failure to register MyMathLab will result in you not having access to assignments. Permission will not be granted to register for MyMathLab after the registration deadline. It is your responsibility to manage your time carefully.

Assignments are given firm deadlines. Understand that you cannot put off an assignment until the last minute, as you may experience technical difficulties or run out of time when attempting to do the work. All work must be completed by the listed due date & time. You should score a 70% or above on each homework for full mastery of course topics. To raise your score to 70%, simply rework missed problems (you do not need to repeat the whole assignment) until your overall score reaches 70%. It is strongly recommended that you rework any problem you guess on or do not get correct the first attempt to ensure you have mastered the material.

**Late assignments will not be accepted for any reason.**

Discussions: Submit discussions by selecting the "Discussions" tab or clicking on the "discussion" link within the module. Detailed instructions for how to submit discussions are in each module links under Content. You must complete the discussion before the due date to receive credit. Each discussion will be worth a maximum of 10 points. **Late discussions will not be accepted for any reason.**

Unit/Module Tests: The tests are accessed by selecting the Quizzes link in NS Online. Tests must be taken ON or BEFORE the due date listed on the Course Outline below or at Assignments Schedules in the Content links (each test will be released for view/access 48 hours before the final time/deadline). Failure to complete a test by the deadline will result in a zero for the test. **There will be no extensions and no make-up tests given for any reason.**

Final Exam: The final exam is also accessed by selecting the Quizzes link in NS Online. The same rules for tests apply to the final exam. The final exam must be taken ON or BEFORE the due date. **There will be no extensions or make-ups given for any reason.**

Technical Difficulties: You may experience technical difficulties related to computer connections or equipment during the term. This cannot be used as an excuse for failure to complete assignments or to participate online. It is your responsibility to locate the computer hardware, software and Internet connections necessary to stay connected and current with your course work online. You should seek alternate Internet connections available through the college's computer labs, the college's library, the public library, and the like.

## **Attendance Policy**

The College is not an attendance taking institution as defined by 34 CFR 668.22(b)(1) in the Code of Federal Regulations; however, students are expected to attend all scheduled classes and laboratories.

- Absences in a course may affect a student's final grade.
- Tardiness may also affect a student's final grade.
- Students are responsible for all work/tests that occur during any missed class session(s) regardless of reason(s) for absence.
- Students who are sick or not well enough to attend class must notify the instructor as soon as possible before the scheduled class time, unless incapacitated or unable to do so. In that case, students must contact the instructor as soon as reasonably possible.
- If a student has an unavoidable conflict with a scheduled class session, students must notify the instructor, preferably before the class session, or as soon as possible.

For purposes of financial aid continued attendance is determined via engagement in the course. This can be accomplished in several ways including, but not limited to, continued attendance and/or participation in on-ground class sessions, participating in D2L as prompted (e.g., responding to an instructor's email, posting to a discussion board), and/or completing and submitting assignments.)

To the extent that attendance is kept in this class it is not for the purpose of the College but is instead associated with the instructor's individual grading rubric. The attendance policy for this class is: In online courses, attendance is signaled by logging on to the D2L/NS Online shell, participating as prompted and completing and submitting assignments by the deadlines published. Campus closures do not affect attendance and assignment completion in online courses.

The first assignment is Discussion 1. These must be submitted by the end of the day on Friday of the first week of class. You must have registered for MyMathlab by the end of the first week of class.

- Report Course Attendance to your instructor by submitting assignments in MyMathLab. Failure to do this will result in a failing grade.
- The homework and quizzes are accessed by selecting " Do Homework" on the left navigation bar after login to MyMathLab. Make sure to select "Show All" to see both Homeworks and Quizzes. Complete homework and quiz assignments for each chapter section by the due date listed.
- Students are expected to view the MyMathLab video lectures and complete the assigned problems, on time, no exceptions. Students are also expected to complete Test Reviews and course Discussions by accessing this NS Online website and submit them on or before the posted due dates. Tests must be taken by the dates listed on the Assignments, Instructions and Schedules links under Content.
- Netiquette rules when communicating online must be observed.
- Take tests per the schedule. Tests and final exam are accessible under the Quizzes tab in our NS Online class webpages. The tests must be taken ON or BEFORE the due date listed on the Course

Outline and on the Schedules links. Submitting homework, quizzes, discussions or testing on the last possible date indicates that a student is behind schedule and is in jeopardy of not successfully completing the course. Extensions on the submission deadline dates will not be granted for any reason.

### **Grading Scale:**

The final letter grade is based on the following scale:

- A: more than 900 points
- B: 899 - 800 points
- C: 799 - 700 points
- D: 699 - 600 points
- F: below 600 points

FA – failure, see below

FN – failure, see below

### **FA**

According to NSCC policy, an FA is awarded to students who do not officially withdraw from a course and do not attend after the cut-off date provided in the academic calendar. 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).” Students who stop attending on or before this date receive an FA; students who stop attending after this date receive an F.

For online courses, attendance is defined by submission of assignments. Students who fail a course and whose last assignment is submitted on or before the FA date will earn an FA for the course. Students who fail a course and whose last assignment is submitted after the FA date will earn an F for the course.

### **FN**

An FN is awarded to students who never attended class.

### **Technology Statement**

- All classes at the College are web enhanced.
- It will be essential for students to 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.
- Students may also be required to use free video conferencing platforms (ex: Zoom, Teams) for classes and meetings.
- Students will be responsible for appropriate dress while on video, to ensure a distraction free environment (mute sound as needed) and to ensure their background is neutral for others to view.
- If you have questions or concerns regarding access to a computer or internet resources, please contact your instructor. Additional information available: <https://www.nsc.edu/current-students/student-online-resources/access-to-internet-and-technology>.
- Certain publisher materials may not work on cellphones.

## **Computer Labs**

Computers are available for student use at each campus during campus open hours. Open computer lab availability for Fall 2020 may vary from campus to campus.

Students should check NSCC website for current hours of operation.

## **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](mailto: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.

Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else's work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor's permission, allowing someone else to copy or use your work, using someone else's work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member's signature. "Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words" (A Writer's Reference 331).

## 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 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.

## Student Wellness

- The general well-being of students is an important component of their academic success. With this in mind, Nashville State Community College has several resources available to provide support when needed:
  - Students with general, non-academic questions and concerns about COVID-19 may email [virusinfo@nsc.edu](mailto:virusinfo@nsc.edu).
  - Five free telephone therapy sessions are available via Agape Counseling by calling 615-781-3000.
  - Online tutoring is available via NetTutor within the D2L course shells.
  - A comprehensive list of online student resources may be found at <https://www.nsc.edu/current-students/student-online-resources>
  - A comprehensive list of student support services may be found at <https://www.nsc.edu/current-students/on-campus-resources/student-support-services>

## Equity Statement

Nashville State Community College has a relentless commitment to the transformation of our institution through the intentional design of college experiences that expect and promote excellence from students, faculty, staff and administration. We consider equity to be an obligation of higher education. We strive to ensure that each student receives what that student needs to be successful, with goals of success beyond the classroom. We do this through an evidence-based and collaborative effort, understanding that our student population has diverse needs that must be addressed. We recognize that this effort may not always be comfortable and that partnering with students is the driving force to overcome barriers to success.

## 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](http://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.

### **Communication Statement**

In this time of uncertainty due to COVID-19, communication between student and faculty is key. At times, situations arise for one or both that makes that communication difficult or delayed. This can include but is not limited to health issues and/or problems with technology. If you have attempted to contact your instructor, and have waited the turnaround time as outlined in the syllabus but have not yet received a response, please reach out for additional support using this survey:

<https://forms.gle/rM7rxFarksRFeA3b8>