Instructor Information:
- Name:
- Office phone:
- Office location:
- Office Hours:
- E-mail address:

Course Description: An introductory mathematics course for non-science majors emphasizing applications. Topics include problem solving, sets, logic, algebra, probability, statistics, consumer mathematics, and finance.

Credit Hours: 3 credits 3 class hours
Prerequisite: Level 2 placement in Math or concurrent enrollment in MATH 0825

Materials Required:
- Students must check with the Instructor before purchasing any materials.
- MyMathLab Access Code: ISBN 032119991X (Instructor course code and high-speed Internet access required)
- Calculator: A calculator that can add, subtract, multiply, divide, raise to powers, and take square roots will be sufficient for this class. The TI-83/84 is recommended and will be used in notes and demonstrations.

Materials Strongly Recommended:
OR

Computer Resources Available:
- Tutorials: www.InterActMath.com (high-speed Internet access required)

Course Outcomes:
Upon successful completion of this course, students will be able to:
1. Solve problems using mathematics, and determine if solutions are reasonable.
   Analyze and solve counting and probability application problems. Analyze and solve problems utilizing Venn Diagrams. Make use of inductive and deductive reasoning to develop problem solving skills and determine if solutions are reasonable. Differentiate types of sets, perform set operations, and apply set notation.
2. Apply mathematical concepts to solve real-life problems using formulas (deduction) and interpret the meaning of the solution.
   Create truth tables to determine the truth value of quantified statements, negations, conjunctions, disjunctions, and conditional statements and their combinations, and utilize these to verify the validity of simple three-statement arguments.
3. Construct meaningful connections (transfer of knowledge) between mathematics and other disciplines.
4. Apply technology for mathematical reasoning and problem solving.
   Apply technology to solve problems involving personal finance such as installment buying, home mortgage and investments.
5. Analyze data/graphs by using mathematical modeling and/or statistical reasoning.
   Analyze data/graphs by using mathematical modeling and/or statistical reasoning. Organize data using frequency tables, histograms, and stem-and-leaf plots, find measures of central tendency and dispersion, and use concepts of normal distribution to analyze data.
6. Represent and translate numbers in different number systems of historical interest, and write and compute in number bases other than base ten.

**Topics**

- Inductive and Deductive Reasoning
- Estimation & Graphs
- Problem Solving
- Basic Set Concepts
- Venn Diagrams/ Subsets
- Venn Diagrams and Operations
- Set Operations with Three Sets
- Surveys and Cardinal Numbers
- Numbers
  - Statement, Negations
  - Compound Statements
  - Truth Tables
  - Equivalent Statements
  - Arguments
  - Early Positional Systems
  - Different Number Bases
  - Computations
  - Fundamental Counting Principal
  - Permutations
- Combinations
- Odds
- Events Involving “Not” and “Or”
- Events Involving “And”
- Conditional Probability
- Sampling, Frequency Distributions, and Graphs
- Measures of Central Tendency
- Measures of Dispersion
- Normal Distribution
- Finance

**Course Policies:**

- **Attendance:** Attendance in this class is required. Students are expected to be on time for and remain until the completion of all class meetings. Students who are marked absent for two consecutive weeks of class will receive an FA grade (equivalent to an F for GPA purposes). If you would like to petition for an exemption after having missed two weeks, you may do so by contacting Dean Womack (Dean of Math and Natural Sciences). Successful petitions will require documentation demonstrating an acceptable reason for having missed two consecutive weeks of class. (Dean Womack: mary.womack@nscc.edu, 615-353-3117, K-240, Main Campus.)

Being tardy disrupts the class. If a student is tardy to class (arriving late and/or leaving class early 2 or more times in a month), he/she will be required to meet with the Dean of Students before returning to class. Attendance will be taken and reported for Financial Aid purposes. If a student is absent, it is the student’s responsibility to obtain missed material and it is suggested that the student contact the instructor as soon as possible. It is recommended that students work at least 2 hours outside of class for each hour inside of class (at least 6 hours outside of class per week). If you fall behind, you will need to catch up quickly.

- **Grading:** The grade for the course will be based on unit tests, homework and quizzes, and a final exam determined by the following distribution:

  - 4 Unit/Module Tests: 15% each (60% total)
  - MyMathLab Homework & Quizzes: 20%
  - Final Exam (**Required**): 20%

The final letter grade is based on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>0-59</td>
<td>F</td>
</tr>
</tbody>
</table>

**FA** – failure, attendance related

**FN** – failure, never attended class

**Note:** 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. A grade of “FN” will be awarded to any student who never attends this course.
**Homework and Quizzes:** Homework and quizzes are required and will count for 20% of your course grade. There will be regular assignments that must be completed using MyMathLab. 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. **It is your responsibility to manage your time carefully.**

Assignments are given firm deadlines. 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%. **Late assignments will not be accepted for any reason.**

**Make up policy:** No make-ups or late work of any kind will be accepted! Manage your time carefully, use a calendar to record due dates, attend class and work in MyMathLab regularly so that are aware of due dates. There are no exceptions to this policy.

**Unit/ Module Tests:** Tests dates will be announced at the beginning of the semester – see the details in the class website (NS Online), in MyMathLab, and from your Instructor. **If you miss a test, the test will be counted as a zero.** However, the lowest test score (including a zero for a missed test) will be replaced by the final exam grade for everyone provided that the final exam grade is higher than the test grade that it replaces. This only applies to one test. If you miss more than one test, the second zero will stand. **There will be no make-up exams for any reason.**

**Final Exam:** This course has a required Comprehensive Final Exam. The final exam must be taken on the appointed day. Any deviations from that date must be for exceptionally necessary reasons/situations; check with your Instructor ahead of time. Incompletes would only be considered for extraordinary reasons and proof would be required.

**Communication:** It is the student’s responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

**Inclement Weather Policy:** If classes at NSCC are cancelled, there will be a posting to the school website in the announcement box at the top of the homepage and will be on the school recording (615) 353-3333. Students need to check their NS Online/D2L shell for a required assignment and information from their instructor. It is the student’s responsibility to do the assignment in order to be prepared for the next class.

**ADA Statement:** Nashville State complies with the Americans with Disabilities Act. If you wish to request any accommodation(s) for this class, contact the Access Services Coordinators at 615-353-3721 or 615-353-3741. Also notify your instructor as soon as possible. Such services must have proof of documentation that is not over three years old.

**Classroom behavior:** Students are expected to respect and support others to create a positive learning environment. Food and drink should be discarded before entering the classroom. All electronic devices are to be turned off (or ‘vibrate’) during class and must be out of sight unless prior consent has been given by the instructor. Students wanting to make use of an electronic note-taking device (laptop, iPad, etc.) must see the instructor and sign a ‘use-contract’ prior to using the device.

**Please be aware that children are not allowed in class or unattended on campus.**

**Class Misconduct and Procedures:** 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 sanctions.
The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct which violates the general rules and regulations of the College. Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.) If a student disrupts the classroom, they may be removed by security. The student will not be allowed to return to class until the issue has been resolved with the Dean of Students.

**Academic Dishonesty (Honor Code)** Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “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 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.

In addition to other possible disciplinary sanctions that may be imposed 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.

**NOTE:** This syllabus is meant as a guide and overview of the course, the topics, the objectives, the general assessments, and some standard policies. Some items are subject to change or revision at the department’s discretion.