Bismarck State College, an innovative community college, offers high quality education, workforce training, and enrichment programs reaching local and global communities.

Current Semester: Fall 2017

Course: College Algebra Math 103. Prerequisite: Minimum of two years of high school math, ASC 93 or qualifying ACT score.

Credit Hours: 4 semester credit hours

Instructor Contact: Email: brandt.j.dick.1@bismarckstate.edu or brandt.dick@underwoodschool.org
Phone Number: 442-3201, (cell) 220-3176

Course Materials: *College Algebra Graphs & Models,* Fifth Edition by Bittinger, Beecher, Ellenbogen, Penna Publisher: Pearson/Addison. Call BSC Bookstore to order 701-224-5453.

Calculator*:* A graphics calculator is **required** for this class. I recommend the TI-82, TI-83, TI-83 Plus, TI-84, TI-85, or TI-86. The calculator will be used extensively in class. You must, therefore, have your calculator with your every day when you come to class. Much of your homework and projects will require the use of the graphics calculator. I will be utilizing the TI-83 Plus for my demonstrations. You will <u>not</u> be allowed to use a TI-89 or TI-92 on tests or quizzes.

Course Description: Solutions of linear and quadratic equations and inequalities, graphing functions and relations, polynomial and rational functions, systems of equations and inequalities, exponential and logarithmic functions.

Course Outcomes:

Course Learning Outcomes (or Course Outcomes)	Program Learning Outcomes (or Program Outcomes)	Institutional Essential Learning Outcomes (IELOs)
Demonstrate algebraic facility with algebraic topics including linear, quadratic, exponential, logarithmic functions	Demonstrate competence in a variety of mathematics courses including algebra, finance, calculus, differential equations, linear algebra, and statistics by analyzing, mathematically modeling, and solving a variety of problems, then interpreting the solution utilizing reflective decision making.	Quantitative Literacy
Produce and interpret graphs of basic functions of these types		Quantitative Literacy
Solve equations and inequalities, both algebraically and graphically		Quantitative Literacy
Solving and model applied problems		Quantitative Literacy; Critical thinking

Unit Objectives: Upon completion of the course, the learner will be able to:
1. Students will demonstrate an understanding of relations and functions as evidenced by classroom activities and objective tests
2. Students will be able to work with equations and inequalities as evidenced by classroom activities and objective tests
3. Students will be able to work with complex numbers as evidenced by classroom activities and objective tests
4. Students will be able to work with rational and polynomial expressions as evidenced by classroom activities and objective tests
5. Students will be successful in working with exponential and logarithmic functions as evidenced by

classroom activities and objective tests

6. Students will be able to solve systems of linear equations as evidenced by classroom activities and objective tests

7. Students will create and use matrices to solve systems of equations as evidenced by classroom activities and objective tests

Active learning: In addition to educational strategies such as reading, listening, and reflecting, when appropriate this class makes use of learning techniques commonly known as active learning. Students should expect to participate in active learning techniques such as discussions and presentations, small group activities, writing, problem-solving, movement, case studies, role-playing, etc. These activities promote analysis, synthesis, and evaluation of class content in order to improve student learning outcomes.

Assessment Methods: During the course you will be asked to do various assignments from within different groupings which have a different weight. The following describes how your grades will be assessed:

- **Exams (60%)** - During this semester you will be asked to take 5 unit exams.
- **Homework/Quizzes (10%)** - At the end of class on declared days, a short quiz will be given in order to determine student retention of material and/or homework will be collected.
- **Projects (5%)** – During the semester, skills gained through the learning of the material will be assessed by individual projects.
- **Final Exam (25%)** - There is a comprehensive final exam given at the end of the semester during finals week.

Grading: Grades are based on the following cut scores:

    A: 90% - 100%
    B: 80% - 89%
    C: 70% - 79%
    D: 60% - 69%
    F: 0% - 59%

Attendance/Makeup: Regular class attendance is a factor in determining your final grade. If you do not attend class regularly, your chances of passing this class are slim. In other words, I expect to see you in class. If you must be absent and need to contact me, call or email me. If I am not available when you call, leave a message.

Unit tests may be made up if you have a valid excuse that I am aware of **before** the exam is given. You will receive a zero on a test if you are absent and I am not aware of the reason. Test missed, with a valid excuse, will be taken the day you return unless other arrangements have been made. If you are ill, be sure to have your school call and let me know.

Policies and Procedures:

Academic Honor Code: Students at BSC are expected to be honorable in behavior and above reproach in pursuit of their academic achievements. Cheating, plagiarism, or collusion in class work, laboratory performance, shop work, or test taking is unacceptable and subject to disciplinary action. More information can be found at https://bismarckstate.edu/uploads/resources/356/studentacademichonorcode.pdf.

Accessibility: If you have a disability that may limit your ability to fully participate in this class, please contact the Student Accessibility Office (SAO) at (701) 224-2575. Personnel from the SAO will work with you and your instructor to arrange for reasonable accommodations after you have completed the registration process and it has been determined that you qualify.

Military/Veteran Statement: If you are currently or have served in the military, please contact the Veterans Services Office at (701) 224-2575 regarding services/benefits to which you may be entitled.

Drop/Withdrawal Deadlines: Term dates can be found on Campus Connection in the class details. Drop and withdraw dates for each term can be found at https://bismarckstate.edu/academics/records/calendarsdeadlines/. Follow this link for the last day to drop a course.

Student Policy Handbook: Student rights and responsibilities are documented including the student conduct policy, student academic honor code, etc. can be found at https://bismarckstate.edu/students/resources/handbook/.

Title IX: For more information on sexual misconduct/Title IX please go to the BSC home page (www.bismarckstate.edu), scroll to the bottom and click on Title IX.

Courtesy Code: Cell phones, Ipods, etc. are not allowed in the ITV classroom.

Course Outline: **Academic Calendar**
Fall Semester 2017

Wednesday, August 23	Classes Begin
Monday, September 4	No Class Labor Day
Thursday, October 19	No Class Teacher's Convention
Thursday, November 23	No Class Thanksgiving Break
Thursday, December 14	Final Test

Course Calendar
(These dates are only approximate. It is likely that we will deviate from this schedule.)

Test 1	September 14	Sections 2.1-2.6
Test 2	October 5	Section 1.4, 6.1-6.3, 6.6
Test 3	October 18	Sections 3.1-3.5
Test 4	November 9	Sections 5.1-5.6
Test 5	December 7	Sections 4.1-4.6