

Winter 2019

**SYLLABUS for MA100**  
**INTERMEDIATE ALGEBRA**

MA100-05 (12321) (8 - 8:50 am) MTWRF WS3801  
MA100-02 (10241) (10 - 10:50 am) MTWRF WS3801  
MA100-04 (11256) (12 - 12:50 pm) MTWRF WS3801  
MA100-01 (10241) (1 - 1:50 am) MTWRF WS3801  
(Credit Hours: 4)

**Instructor:** (Ms.) Rosanne Parks

Office: Jamrich 2213

Office phone: 227-1479 (No voice mail)

e-mail: [rparks@nmu.edu](mailto:rparks@nmu.edu) (best way to contact me)

Math/CS office: 227-2020

Office Hours:

11 am – 12 pm and 2 pm – 3 pm MTWR

Other times by appointment

Drop-ins are **always** welcome

---

**Prerequisite:** AT LEAST a C– in MA090 or a satisfactory score on the Math Placement Exam.

**Required Materials:**

- (1) **Text:** *Beginning & Intermediate Algebra* (Fourth Edition) by Miller, O’Neill, and Hyde
- (2) **NMU e-mail account which you must check DAILY**
- (3) **Portfolio:** Loose leaf notebook (**LARGE rings**) for class notes & assignments, tests & quizzes  
Refer to the Portfolio Organization Handout.
- (4) **Supplies:** Pencil and eraser (**REQUIRED** for all tests, quizzes, graded assignments, and submitted homework), graph paper, ruler or straight edge
- (5) **Scientific calculator** (fraction key useful) that is without algebraic technology. **A cell phone calculator is not acceptable.** (You do not need a graphing calculator for this course.)

**Note:** Laptops will not be used in class.

**Additional Expectations:**

- arrive for every class with required tools: textbook, portfolio (notebook,), pencil, and calculator
- keep cell phones and other electronic devices out of sight and on silent. (Please speak to the instructor if you anticipate receiving an emergency call during class.)
- be attentive and actively participate in class

---

**COURSE DESCRIPTION:** MA100 includes the study of lines, linear equations and inequalities, systems of linear equations, graphing, polynomials, algebraic fractions (rational expressions), rational equations, quadratic equations, radical equations, and exponential equations. Applications are emphasized.

Chapters 3 – 11 and chapter 12 sections 2 and 6 will be covered.

**COURSE GOALS and PURPOSE:** This course aims to help students (1) build a secure foundation in algebra skills through meaningful contextual problems and situations and (2) develop skills that will help them succeed in a college-level math class.

**COURSE OBJECTIVES:**

- a) Students will simplify and perform operations on algebraic expressions.
- b) Students will solve algebraic equations.
- c) Students will graph algebraic functions and relations.
- d) Students will solve applications of algebraic concepts.
- e) Students will develop the necessary academic and affective skills needed to gain entry to college level mathematics.

**STUDENT LEARNING OUTCOMES FOR INTERMEDIATE ALGEBRA**

After successful completion of MA100 students will be able to:

**LINEAR EQUATIONS AND INEQUALITIES**

Apply concepts of sets (unions, intersections, interval notation, set notation, Venn diagrams) (b)

Solve and graph linear absolute value equations (b)

Solve systems of linear equations (b, c)

Solve and graph linear inequalities (b, c)

**POLYNOMIALS AND FACTORING**

Perform operations on and factor polynomial expressions (a)

Factor the sum and difference of cubes (a)

Factor quadratic expressions when the leading coefficient is not 1 (a)

## RATIONAL AND RADICAL EXPRESSIONS AND EQUATIONS

- Evaluate, perform operations on, and simplify rational expressions (a)
- Evaluate, perform operations on, and simplify radical expressions (a)
- Solve equations containing rational expressions (b)
- Solve radical equations (b)
- Apply complex numbers (a, b)

## QUADRATIC EQUATIONS AND FUNCTIONS

- Solve quadratic equations by factoring (b)
- Solve quadratic equations by completing the square (b)
- Solve quadratic equations by quadratic formula (b)
- Solve quadratic equations by square root method (b)
- Graph and interpret quadratic functions (c)
- Graph and interpret linear functions (c)
- Graph and interpret square root functions (c)
- Graph and interpret absolute value functions (c)

## APPLICATIONS

Solve applied problems: to include, but not limited to, joint and combined variation, quadratic applications, basic geometry and basic exponential problems (d)

**Learning outcomes will be assessed using assignments, quizzes, tests, and the final exam.**

---

**ATTENDANCE:** Daily attendance is expected. Attendance will be recorded. Absence from class, for whatever reason, does not excuse a student from any class work or assignments missed. The student must assume full responsibility for making arrangements for any assignments missed due to the absence. Cell phone use in class may result in a student being marked absent for the class.

## **DEVELOPMENTAL MATHEMATICS LAB SESSION/TUTORING POLICY:**

Students are required to meet with the Teaching Assistant (TA) and/or Instructor during their office hours at any time in which the student's grade on a test is below 70%. Meeting with the TA or Instructor is optional, though strongly recommended, for test grades in the 70 – 79% range. Students must continue to meet with the TA until they achieve at least 70% on a subsequent test. All students are required to keep a tutoring log in their portfolio.

## **ASSIGNMENTS:**

**PLAN TO SPEND AN AVERAGE OF 1 - 2 HOURS ON EACH ASSIGNMENT.** If your schedule will not permit this much homework time, I recommend that you seriously consider dropping the course.

Reading and problems will be assigned each day. In addition, you should take notes which include the material and examples presented in class. Each homework assignment (and each section within a homework assignment) should start on a clean sheet of paper and start with a **heading** which includes your name, the date assigned, section, page numbers, and problem numbers assigned. (*Refer to the Portfolio Requirements.*) In doing homework, copy the problem and **SHOW YOUR WORK** for each problem assigned. **Make corrections** as we discuss the problems. **SUGGESTION:** Do not erase your original work. Do your corrections in red ink. Assignments will be checked in frequently. At times, you may be asked to submit (for a grade) selected problems from a completed homework assignment. These problems are to be copied from your portfolio without using your textbook. Several homework assignments (with varying point values) will be collected and graded throughout the semester. Late assignments will not be accepted!

Remember: **MATHEMATICS IS LEARNED BY DOING, NOT BY OBSERVING!**

## **PORTFOLIOS**

**Portfolios will be collected and graded on test days.** Each portfolio check is worth 20 points. Refer to the handout concerning portfolio requirements.

**TESTS & QUIZZES:** Quizzes will be given often and are worth 10 – 25 points each. (There usually will be at least one 25 point quiz each week.) Some may not be announced. **At least one question per quiz may be taken from your portfolio. You may not use your textbook for these questions.** No make-up quizzes will be given without **PRIOR ARRANGEMENT**. For a student with fewer than five absences, the lowest 25-point quiz score will be dropped if doing so would improve the student's average. There will be 5 – 6 tests, each worth 100 points. Tests will cover assigned reading, material presented in class, and concepts covered in homework. **NO TEST SCORES WILL BE DROPPED.**

You must take tests and quizzes at their scheduled times. No make-up is possible for any test unless you notify me **before** test time. A documented excuse may be requested in order to take a make-up test. Only students who have taken all tests will be admitted to the final exam. Thus, missing a test guarantees earning a failing course grade except in extremely unusual circumstances.

**FINAL EXAM:** The *comprehensive* final exam will be worth 200 – 250 points.

**WRITTEN WORK:** For **written work** (quizzes, graded assignments, tests, final exam, homework), you will be graded not only on correctness, but also on clarity of work. If I cannot read your writing, then a correct answer **will not** get you full credit. You must show all steps. Just giving the answer will not earn full credit. Again, you must show all work. Word (application) problems can often be solved by just “thinking” about it. However, in this class you must use algebra and show all work to earn credit. **Reminder:** All quizzes, tests, graded assignments and the final exam must be done in pencil.

**GRADES:** To pass this course you must take all tests. Your course grade will be based on the total points earned on your quizzes, tests, graded assignments, portfolio, study skills assignments, and final exam together with any bonus (extra credit) points earned. Grades on quizzes and tests are not “curved.”

The grading scale is: A: 90 - 100%; B: 80 - 89%; C: 70 - 79%; D: 60 - 69%; F: < 60%.

(**NOTE:** A grade of **AT LEAST C-** in MA100 is required for registration in MA103, MA104, or MA150.  
A grade of **AT LEAST B-** in MA100 is required for registration in MA111.)

**EXTRA HELP:** My Office: during regular office hours or by appointment (remember: drop-ins are welcome)  
Office Hours with the Teaching Assistants (preferably with one of my Teaching Assistants)  
Math Study Lab/Tutoring Room: West Science (WS) 3810  
Free extra help is available. Tutors are available Monday – Friday from 9 am – 6 pm  
All-Campus Tutorial Service (free) in the LRC (evening hours available several days per week)

**Study groups are recommended.**

**The following websites contain short video lessons:**

www.amybarnsleymath2.com (MA090 topics)  
www.amybarnsleymath.com (MA100 topics)

**NOTE:** The following books are on reserve in the library. They are at the front counter and are listed under Barnsley. The textbook is a 2 hour reserve (students **must** use it in the library), but the other books are on 3 day check out.

- (1) Algebra I for Dummies: Step by step lessons and practice for algebra I; Sterling, Mary Jane
- (2) Algebra II for Dummies: Step by step lessons and practice for algebra II; Sterling, Mary Jane
- (3) Basic Math and Pre-algebra for Dummies; Zegarelli, Mark
- (4) Beginning & Intermediate algebra; Miller, J; O'Neill, M; Hyde, N (*textbook*)

---

**DISABILITY SERVICES:** If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700 or [disserv@nmu.edu](mailto:disserv@nmu.edu)). Reasonable and effective accommodations and services will be provided to students if requests are made **in a timely manner**, with appropriate documentation, in accordance with federal, state, and University guidelines.

Here is the website for disability services: <http://www.nmu.edu/disabilityservices/node/1>

**ACADEMIC INTEGRITY:** Students are expected to do their own work and follow the university academic honesty policy. This policy can be found in the student handbook. See the link here: <http://www.num.edu/dso/studenthandbook>

---

**IMPORTANT DATES: (Full Semester Courses)**

**Drop:** Last day to drop a class with no course record (100% refund & no grade) is Tuesday, January 22, 2019 by 5 pm.  
Drop Procedure: <http://www.nmu.edu/records/adddropprocedure>

**Withdrawals:** Last day for course withdrawal is Friday, March 29, 2019 by 5 pm. I will recommend withdrawal for any student earning below 60%. A withdrawal (W) grade and a failing (F) grade have the same effect on your full time status. The difference is that an F grade hurts your GPA, but a W grade does not. It always benefits you to get a W, instead of an F.

(**Remember:** A grade of AT LEAST C- (70%) in MA100 is required for registration in MA103 or MA104.)

Withdrawal procedure: <http://www.nmu.edu/records/node/19>

---

## **FINAL EXAM:**

**MA100-05 (8 am class):** Monday April 29, from 8 am – 9:50 am (room WS3801)  
**MA100-02 (10 am class):** Tuesday April 30, from 10 am – 11:50 pm (room WS3801)  
**MA100-04 (12 pm class):** Monday, April 29, from 12 pm – 1:50 pm (room WS3801)  
**MA100-01 (1 pm class):** Wednesday, May 1 from 12 pm – 1:50 pm (room WS3801)

---

---

## **TEACHING ASSISTANTS**

Teaching assistants meet with you individually or in small groups. Just email them or take to them in class. Their job is to help improve student success.

8 am class	Brittany Dingels	<a href="mailto:bdingels@nmu.edu">bdingels@nmu.edu</a>
10 am class	Sarah Kendall	<a href="mailto:skendall@nmu.edu">skendall@nmu.edu</a>
12 pm class	Kassey Kytola	<a href="mailto:kkytola@nmu.edu">kkytola@nmu.edu</a>
1 pm class	Katie Ziebell	<a href="mailto:kziebell@nmu.edu">kziebell@nmu.edu</a>