

Math 880 - Introductory and Intermediate Algebra

Spring 2016

Professor: Carrie Naughton

Office: Library L247

Office Hours: MW 11 am – 12 pm, 2-2:30 pm, Monday 9-10 pm (online), Tuesday 8:00-9:00 pm (online) or by appt.

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Email: cnaught@inverhills.mnscu.edu

Website: <http://faculty.inverhills.edu/cnaught/> (similar material and gradebook available on D2L)

Prerequisite: Recommendation based on the results of the Inver Hills Assessment Inventory. This course is designed for college students who want a self-paced course to learn or review introductory and intermediate algebra topics in preparation for college algebra or precalculus. Students planning to take Math for Liberal Arts, Statistics or Mathematical Foundations as their last math course would be better served by taking Math 820. This course does not satisfy any graduation distribution requirements.

Learning Outcomes:

The student should be able to:

- 1) Translate words into algebraic expressions, equations, and inequalities; as well as simplify algebraic expressions.
- 2) Identify properties of real numbers and perform arithmetic of real numbers.
- 3) Perform arithmetic of polynomials and factor polynomials.
- 4) Solve linear, literal, quadratic, and systems of linear equations; as well as linear inequalities.
- 5) Solve applications using the equations and inequalities in Outcome 4.
- 6) Use laws of exponents to simplify expressions with integer exponents.
- 7) Graph linear equations using slope and intercept, find equations of lines, and interpret linear models.
- 8) Evaluate functions using proper notation and find the domain and range of functions based on their graphs.
- 9) Perform operations on rational expressions and simplify them. Solve rational equations and use rational equations to solve applied problems.
- 10) Perform operations on radical expressions and simplify them - using radical or rational exponent notation. Solve radical equations and use radical equations to solve applied problems.
- 11) Solve quadratic equations and other types of equations using quadratic methods, and use quadratic equations to solve applied problems.
- 12) Graph linear and nonlinear functions (square root, absolute value, quadratic, exponential, logarithmic) and apply translations and vertical reflections to the graphs of these functions.
- 13) Graph piecewise-defined functions.
- 14) Simplify logarithmic expressions and solve logarithmic equations.
- 14) Solve exponential equations and use exponential equations to solve applied problems.
- 15) Solve absolute value equations and inequalities.
- 16) Solve polynomial, rational and systems of inequalities.

Critical thinking will be incorporated throughout the course.

Text:

You must have a MyMathLab access code (REQUIRED). You can buy the MyMathLab access code at the bookstore or at www.pearsonmylab.com. The MyMathLab access code gives you access to the multimedia textbook. We will be using the following textbook: *Beginning and Intermediate Algebra*, 5th Edition by Elayn Martin-Gay, published by Pearson/Addison Wesley. . If you prefer to also buy a hard copy of the textbook (OPTIONAL), it can be purchased at the bookstore or you can buy a copy online through various vendors. A slightly older edition (4th Edition) of the textbook would also work just fine. A hard copy of the textbook is portable and can be taken anywhere and used in the future, but is expensive. The multimedia textbook available through MyMathLab is free with the MyMathLab access code, but can only be accessed with an internet connection and you will not have access to it after this course is over.

You will also need to access course materials from Desire2Learn (D2L).

Calculators: A scientific calculator is highly recommended. I recommend a TI 30XII, if you don't already own one. A graphing calculator is fine if you already have one, but is not necessary for the course.

Math Center: Help is available in the Math Learning Center. The hours are M-Th: 9-6, and F: 9-4.

Important Dates:

January 11, Classes begin	March 7 – March 13, Spring Break
January 18, Holiday	April 1, No School
February 10, Student Success Day	May 10, Final Exam 2-5 pm
February 15, Holiday	

Grading Criteria for Math 840:

Groupwork:	8 activities worth 5 points each
Homework:	work for each test and practice exam worth about 20 points
Chapter Tests:	6 tests each worth 20 points (you must score 75% mastery - retakes allowed)
Midterm Exam:	worth 100 points (you must score 75% mastery - retakes allowed)
Final Exam:	worth 200 points (retakes NOT allowed)

Grading Criteria for Math 940:

Groupwork:	8 activities worth 5 points each
Homework:	work for each test and practice exam worth about 20 points
Chapter Tests:	5 tests each worth 20 points (you must score 75% mastery - retakes allowed)
Midterm Exam:	worth 100 points (you must score 75% mastery - retakes allowed)
Final Exam:	worth 200 points (retakes NOT allowed)

Grade Scale:

A = 90-100%
B = 80-87%
C = 70-79%
D = 60-69%
NC = Below 60
P = Minimum of 70

Please note that you must earn a minimum grade of "C" (70%) in order to qualify for the next math course.

You MUST earn at least 70% in the Math 840 portion of the course in order to move on to Math 940. You MUST earn at least 70% in the Math 940 portion of the course to pass Math 880. If so, your final Math 880 grade will be based on total points earned from Math 940 only. If you only pass the Math 840 portion, then you will get a grade for Math 840 on your transcript. If you pass both Math 840 and 940, then you will get a grade for Math 880 on your transcript that will count as a prerequisite for higher level courses.

Satisfactory Academic Progress:

Students need to maintain both a cumulative GPA of 2.0 and cumulative completion rate of at least 67% of all attempted credits for each term of attendance. If a student fails to meet these requirements, they will be placed on academic and/or financial aid probation.

Homework:

Daily homework will not be graded or collected in this course. It is meant to provide you with review and practice of material relevant to each Chapter test. You may do as much or as little HW as needed to pass the Chapter tests with 85% mastery. Homework and practice problems are available from the textbook and also from My Math Lab. **I highly recommend doing some HW on MyMathLab as this will provide examples just like on the Chapter tests and will give you practice on how to correctly type in your answers.** I will not grade this HW. **However, you must turn in your work, written neatly on a piece of paper, for each Chapter Test that you pass with 85%. There are also practice midterms and final exam review sheets that must be completed and turned in for points before you will be allowed to take the midterm and final exam.** Work for each Chapter Test will be worth a maximum of 2 points. Review sheets for the midterms and finals will be worth 5 points each.

Groupwork:

A groupwork activity will be given at least once a week. You are expected to work with your classmates to answer questions based on the material covered in class that day. Each activity will be worth 5 points. You will be given about 20 groupwork activities (1-2 per week), however only 8 will be recorded towards your Math 840 grade and 8 towards your Math 940 grade, so you can drop your two lowest scores. If you miss an activity, then that will be the activity that you drop. No late assignments will be accepted. Please note that on all activities and paper-pencil Midterms and Finals, I will be evaluating your **solutions**, not just your **answers**. A correct answer with no supporting work will earn little credit, but an incorrect answer with good reasoning and a small error will earn more credit. I expect that you will be showing work as completely as you can.

Exams:

There will be 6 Chapter Tests given online in My Math Lab for the Math 840 portion and 5 Chapter Tests given online for the Math 940 portion of the course. You must pass each test with 75% success or higher. If not, you may retake the tests. I strongly recommend that you get help on the material before retaking the test. You can get help by doing more HW on My Math Lab, using additional My Math Lab and textbook support (like video lectures, chapter reviews, etc.), getting help in class, going to the math center, or getting a peer tutor. There will also be a paper-pencil Midterm Exam and Final Exam for both Math 840 and Math 940. You must pass the Midterm Exam with a 75% success rate. If not, then three retakes will be available until success is achieved. However, there will only be one chance to achieve 70% success or higher on the Final Exam. **Each Chapter Test is due by Sunday at 10 pm. Please refer to your calendar for the due dates of each Chapter Test, Midterm and Final Exam. You will not be allowed to take your Midterms or Final Exams unless each of the prerequisite Chapter Tests have been passed with 75% or higher.**

Attendance:

Even though no official attendance is taken, regular attendance is recommended. A schedule of recommended deadlines will be provided on My Math Lab. This is meant to give you guidelines on when tests should be completed so that both Math 840 and Math 940 can be completed in one semester. **Going slower than the suggested calendar will jeopardize your ability to complete both courses in one term.** If you fail to complete all of Math 940 this semester, then you will only get credit for Math 840, assuming you pass Math 840. **If you miss class, you will not be allowed to turn in the groupwork assignment that was due on the day that you missed.**

Technology:

- You will need daily access to a **high-speed internet connection** (DSL, cable modem, or equivalent).
- You will need to have **minimal technical skills** downloading, uploading, and printing pdf and Word files. You also need minimal skills using e-mail, D2L and online software, including MyMathLab. You will also need to be able to download and watch windows media or flash format videos.
- You will need to **download all plug-ins for MyMathLab**. Once you purchase the MyMathLab access code and register on MyMathLab, you can go through the Installation Wizard to download all necessary plug-ins. These are required to watch video lectures, work through guided practice problems and take Chapter Tests.
- You may want **access to a printer** in order to print off copies of the activities and blank notes pages for the Video Lectures.
- **The videos found in Content on D2L should play on either a PC or Mac computer. If you are watching the videos from my faculty webpage, then you will want to play the Windows Media Video (wmv) lectures if you have a PC. If you have a Mac, then you will need to play the Flash format videos.** If you are experiencing any trouble getting the videos to work through D2L, you can also access the video lectures from [my faculty webpage](#) (both formats are available). Or you can access my videos by going to [my YouTube channel](#). Click on Videos, then Playlists to access each video by course and chapter. Another option would be to access the Video Lectures by clicking on HOMEWORK on MyMathLab and clicking on the Instructor's Video Lectures for each chapter.
- If you are watching the wmv videos from my faculty webpage, then you may need to [upgrade to the latest version of Windows Media Player](#) in order to view my Video Lectures.
- You need to **have a back-up plan** in case your main computer access is not available. Make sure that you know of a library, coffee house, friend, computer lab, or some other source where you can get on-line to access course materials and take tests. **Internet disruptions or computer malfunctions are NOT acceptable excuses for missing deadlines.**

Technical Assistance:

- 1) For issues with D2L, go.inverhills.edu e-mail, or login and password information, visit the Inver Hills Computer Lab (1st floor of the Library) and speak personally with a computer lab assistant. You can also fill out a Student Help Desk ticket at: <http://www.inverhills.edu/Technology/StudentHelpRequest.aspx>, or call the Computer Lab at 651-450-3653. The Technical Support Team strives to respond within 1 business day. For Computer Lab hours, please go to: <http://www.inverhills.edu/technology/CurrentStudents/ComputerLab.aspx>
- 2) For D2L help, you can visit the D2L Customer Helpdesk at: <https://d2l.custhelp.com/>. This site may get you a quicker response to D2L questions, especially at night or on weekends.
- 3) For issues with MyMathLab, go to <http://247pearsoned.com> for 24 hour, 7 days a week technical support. You can send an e-mail or do an online chat with a service representative.

Communication:

Each student must have an e-mail account set up. If you do not know your e-mail address or password, please visit the Inver Hills computer lab (1st floor of the Library) for help or go to the Inver Hills Activate student accounts webpage at: <http://www.inverhills.edu/accounts/>. I may be sending you e-mails occasionally, so I would recommend that you **check your e-mail** a couple of times a week for updates. If I need to speak with you individually or discuss your grades, I may be sending you an e-mail through go.inverhills.edu. It is your responsibility to regularly check this e-mail. **If you miss information or opportunities because you did not read your e-mail, there will be no chance to make it up.** If you prefer to use a different e-mail address, then it is your responsibility to change your e-mail contact information under Profile on D2L, otherwise it will default to the go.inverhills.edu account.

If you need to contact me, I would encourage you to e-mail me or stop by during my office hours. You can leave me a voice mail, but e-mail will get you a quicker response and is my preferred method of communication. I am only on campus Mondays, Wednesdays and Thursdays. I may also not be able to respond to an e-mail sent over the weekend until Monday. I will respond to all e-mails and discussion board posts within 24-48 hours (usually less) Monday-Friday. I will grade all activities and exams and post grades within 1-2 days of the due date (usually sooner).

Video Lectures:

Online video lectures created by your instructor are available on D2L (under Content) and also on the instructor's webpage, YouTube channel and under HOMEWORK on MyMathLab. These are meant to provide you with additional resources for learning the content of the course. You should print off blank notes pages first, then watch the videos and take notes as you listen. **These videos should be one of the major resources you use to learn the material and will mostly likely be the first place you start.** The video lectures provide some examples and content that is not necessarily covered in the textbook, yet is required for the course and exams. MyMathLab tends to give problems that are slightly easier in difficulty than what is expected in the course, so please refer to the video lectures and D2L Activity Homework to get a good idea of what to expect on the midterm and final exam. To watch the videos on D2L, you will need to click on the video under Content. You can also download the videos under Content as well. If you can't get the videos to play through D2L, then the easiest option would be to access the Video Lectures by clicking on HOMEWORK on MyMathLab and clicking on the Instructor's Video Lectures for each chapter. You can also access these [videos from my faculty webpage](#). Or you can access my videos by going to [my YouTube channel](#). Click on Videos, then Playlists to access each video by course and chapter. **If you are having trouble getting the Video Lectures to play on your computer, please click on "HELP! I can't get the video lectures to work!" found on D2L under Content.**

Additional video lectures created by the textbook publishers (Pearson) can be found on MyMathLab. You can access them by going to HOMEWORK and clicking on the MML Videos, Textbook and MML Resources link for each chapter. You can also access them through the Multimedia Library or through the HW sets created for each chapter. These resources including videos, animations, power point presentations, chapter test prep videos, and the study plan are all available through MyMathLab. They are not required, but feel free to explore and use as needed.

Other Policies:

As a courtesy to all, please be sure that your cell phone and pager are turned off during class.

Be on time. It is very disruptive to those around you if you come in late.

Be courteous.

Be in class to be successful.

You are responsible for what happens in class whether you are in attendance or not.

Do not cheat. This implies that you are always doing **your own work** on all HW, online exams, midterms and finals. Any cheating will result in a zero on that test, exam, or homework. Other actions may be taken at the discretion of the instructor. For more information you can visit the Academic Integrity Policy or the Code of Conduct for Student Behavior (both located at <http://www.inverhills.edu/StudentResources/CollegePolicies>).

Access/Accommodations:

The current IHCC college policy on serving students with disabilities can be found at [IHCC Access for Individuals with Disabilities](#) and the current MnSCU policy can be found at [MnSCU Access for Individuals with Disabilities](#).

If there are any other requests that you would like to make in order to ensure your accessibility to any part of this course, please see the instructor, or contact the Counseling and Advising Department at 651-450-3508 or use your preferred relay method.

- 1) Counseling and Advising Department: 651-450-3508
- 2) Kayla Swenson, Disability Services Coordinator: kswenso@inverhills.edu, College Center 211
- 3) E-mail: dss@inverhills.edu
- 4) [Disability Resources webpage](#)

Student Accountability:

- **Manage your time carefully.** Start work early enough in the week to get help from the instructor and tutors before the assignment is due.
- **Use the discussion board to ask questions and get help in a timely manner.** Waiting until the last hour to post a question will not get you the help you need in time and it does not help build a helpful online classroom community.
- **Even though this is a face-to-face class, you may not always get all your questions answered in class.** You may need to get some one-on-one help in office hours, in the math center or with a peer tutor, so make sure you have time during the week where you can come in for help. If you are working all day, it may be an issue for you to find time to meet with someone for help when the college is open, so you may need to find some help outside of the college.
- **Be in class for all of the lectures.** If you have to miss class, then you are expected to watch the video lectures on D2L to get caught up.
- **Your grades reflect the quality of your understanding of the material.** If your homework and tests are below average (below 75%), then your grade will also be below average.
- **You are graded on your performance in the class, not on your personal life decisions.** If you get a bad grade because of a personal situation that caused you to miss work or fail a test, your instructor can only judge the work that you accomplished in the course. You are graded on your actual performance in class, not on your potential. You must demonstrate your ability to your instructor.
- **This course is a prerequisite for other math courses, so your performance is very important.** You must demonstrate your ability in order to be ready for the next course and be successful.
- **If you are having problems or struggling with the material, it is your responsibility to get the help that you need.** There are lots of resources available to help you on campus and online. Start your work early enough so that you can recognize when you need help and still have time to get it before an assignment is due.

Suggestions for successfully completing this course:

1. Follow the Weekly Schedule; don't take weeks off from the course.
2. Start working on HW and groupwork activities as soon as possible. I have no problem with students working together to complete activities; in fact, I strongly encourage it!
3. Watch all of my Video Lectures posted on the Content page of D2L. These lectures cover all of the material in the course including some topics not found in the textbook, but covered on the Midterm and Final Exam. These Video Lectures should be your first step towards learning the material.
4. Make sure you use all of your resources to learn the course material. Read through the text; watch my Video Lectures as well as those on MyMathLab; work through guided problems on MyMathLab; work through suggested homework problems in the text and on MyMathLab; and use the Multimedia Library on MyMathLab to view sample problems, animations, video clips, etc.
5. Attend office hours.
6. Get help on HW and groupwork activities in the Math Center or with a free Peer Tutor. Work together with fellow students!
7. **SHOW YOUR WORK** on all groupwork activities, Tests, Midterms and Finals.
8. Take a Chapter Test as soon as you feel you understand the material that the test covers well; don't leave Tests until the day or night before the deadline. It may take several attempts before you get 85%, so start early!
9. **DON'T FALL BEHIND!!!** (It bears repeating!)
10. Ask for help when you need it.