

# Online Math 96

## Topics in Intermediate Algebra

### Summer 2011

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**Office:** Library L247  
**Office Hours:** ONLINE MW 3 – 4 pm, TH 8 – 9 pm (may vary)  
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**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 or a grade of a C or better in Math 94. This course is designed for college students who need to learn or review intermediate algebra topics in preparation for Math 1101 (Math for Liberal Arts), Math 1103 (Statistics), or Math 1113 (Math for Decision Making). This course **does not** fulfill the Intermediate Algebra prerequisite for Math 1105, Math 1106, Math 1118 or Math 1127. Students planning to take Math for Elementary Education, College Algebra, or Precalculus should enroll in Math 0099, Intermediate Algebra. This course does not satisfy any graduation distribution requirements.

**Learning Outcomes:** Students will be able to:

1. solve applications using skills and concepts developed throughout the course.
2. identify functions, interpret function notation, and determine the domain and range of a function.
3. calculate the slope of a line, write linear equations, and graph lines.
4. solve linear inequalities in one and two variables, solve compound inequalities and graph them.
5. solve systems of linear equations in two and three variables and determine matrix solutions to linear systems.
6. use properties of integer exponents to simplify expressions.
7. simplify radical expressions, expressions with rational exponents, and graph basic radical functions.
8. identify, simplify and operate with complex numbers.
9. identify polynomial functions and graph cubic and quadratic functions.
10. solve quadratic functions using the square root method and the quadratic formula.
11. evaluate exponential expressions and graph basic exponential functions.
12. evaluate logarithmic expressions and graph basic logarithmic functions.
13. find the terms of a sequence given the general term, find the general term of a sequence, and find partial sums.
14. expand and evaluate sums in summation notation and write sums in summation notation.
15. identify arithmetic and geometric sequences and find their partial sums.

**Text:** **You must have a MyMathLab access code.** This can be purchased shrink-wrapped with the textbook: Beginning and Intermediate Algebra, 4th Edition by Elayn Martin-Gay, published by Pearson/Addison Wesley **or** you can just buy the MyMathLab access code at <http://www.coursecompass.com> and use the Multimedia Textbook that is available on MyMathLab. A hard copy of the textbook purchased at the bookstore with MyMathLab will cost more, but it is portable and can be taken anywhere and used in the future. The Multimedia textbook available through MyMathLab is much cheaper 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 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. Cell phone calculators are not allowed on exams.

## Grading Criteria:

<b>Homework:</b>	8 activities worth 20 points each
<b>Discussion Posts:</b>	14 postings due worth approximately 100 points
<b>Chapter Tests:</b>	7 tests each worth 50 points (you must score 75% mastery - retakes allowed)
<b>Final Exam:</b>	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.*

## Important Dates:

May 31, Classes begin  
June 13, Last Day to Withdraw  
July 4, Holiday  
July 20, Final Exam 6 – 9 pm

## 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 75% mastery. Homework and practice problems are available from the textbook and also from MyMathLab. The homework sets on MyMathLab will match the style and difficulty of the MyMathLab tests. It would be a very good idea to try some of the MyMathLab homework first, before taking the tests, so that you can practice entering in answers the way MyMathLab wants them done. This homework is not graded. **However, you must also turn in 8 homework activities worth 20 points each.** These activities can be found on the Content page of D2L. There will be one activity per chapter located below the Video Lectures. You will need to print off the activity, show all of your work and turn it in to me by the due date. You can fax it to me (the number will be announced on D2L and in e-mail) or scan in your work and submit it to the D2L dropbox. **If you are scanning in and putting it in the drop-box, please try to send a single file (not multiple files) that is a pdf or Word file (not jpg). Also, please write your name at the top of the assignment. There is also a final exam review sheet that must be completed and turned in for 20 points on the day of the final exam. Please refer to the Weekly Schedule to see due dates. All activities are due on Sundays by 10 pm.** You will be allowed to drop your lowest activity score throughout the semester.

## Exams:

There will be 7 Chapter Tests given online in MyMathLab. You must pass each MyMathLab test with 75% success or higher. If not, you will need to retake the test until you pass with 75%. If you do not pass with 75% by the deadline, then you will receive a zero for that test. **Each Chapter Test is due Sunday by 10 pm with a 75% or higher.** Please be sure to give yourself enough time to pass with 75% before the 10 pm deadline. **Refer to the Weekly Schedule to see due dates.** I strongly recommend that you get help on the material before retaking the test. You can get help by doing more HW from the textbook or on MyMathLab, using additional MyMathLab and textbook support (like video lectures, chapter reviews, etc.), getting help during office hours, going to the math center, or getting a peer tutor. You are encouraged to take the Tests well before the deadline. It often takes several attempts before you reach 75%, so take the tests early. MyMathLab is very particular about how you enter in your answers and it will take practice getting used to it. I would recommend taking the test at least once the week before it is due to see what topics you need to study up on, then retake as necessary. You should keep track of your work for each Test. If you feel that MyMathLab has graded your Test incorrectly, feel free to e-mail me the question number so that I can review it. I may ask to see your work for that Test to verify that you had the correct solution. You may attempt to take the test again so that you can improve your score beyond 75%. If so, I will record the highest score, not the latest attempt.

There will also be a paper-pencil Final Exam given on campus on July 20th from 6 – 9 pm. There will only be one chance to take the final exam. Please make sure that you put forth your best effort on the day of the final exam. You will bring your Final Exam Review sheet with you to the final exam to turn in. **If you are taking the Final at a location other than Inver Hills, you need to notify me at least two weeks in advance of the time, location, e-mail address, and proctor for your Final.**

## Discussion Board:

You are required to make postings to the D2L discussion board each week. The first post due will be an introductory post. The remaining posts will be regarding any questions you have about the course or content. **You are required to submit at least two posts by 10 pm on Sunday of each week.** I would encourage you to use the discussion more often, and use it as an additional resource to get help from me and your classmates on any questions you have about the activities and tests. These posts should be questions or responses to others' questions about activities or course material. The posts must be different from what others have posted; in other words, your post cannot simply be that you agree with what someone else has posted. You must add something new to the discussion. An example of a good post might be, "I keep getting #10 wrong. Here is what I did... Can anyone tell me where I went wrong?" I strongly encourage you to begin looking at the activities and Chapter Tests as early as possible so you can ask questions as early as possible. I encourage you to post questions related to the activities, the course material in general or any other course information/details. Please be polite with your posts, using correct English and a respectful tone. You will earn 10 points each week for your discussion posts.

## Netiquette Guidelines:

- Online messages can be quite informal, but try, nevertheless, to express yourself using proper spelling, capitalization, grammar, usage and punctuation. Do not use all capitals. Do not use abbreviations or slang, as some or your peers may not understand it.
- Always think before you write. In an online format, it is easy for your message to be misinterpreted, so always think twice before you hit submit.
- Use titles that accurately and concisely describe the contents of your e-mail or posting.
- Read existing follow-up postings and don't repeat what has already been said.
- Treat people the same as you would face-to-face. It is easy to hide behind the computer. In some cases it empowers people to treat others in ways they would not in person. Treat all with dignity and respect and you can expect that in return.

## Communication:

Each student must have a go.inverhills.edu e-mail account set up. If you do not know your e-mail address or password, please visit the Inver Hills computer lab (1<sup>st</sup> floor of the Library) for help. I will be sending you e-mails at least twice a week, so I would recommend that you **check your go.inverhills.edu e-mail** several times a week for updates. You will also need to **regularly check D2L** for announcements about the course. These will be posted on the course home page of D2L. If you submit your activity to the D2L dropbox, there occasionally may be an error in the transmission. So always be sure to check back in to the D2L dropbox for feedback. I will let you know within 1-2 days if I have or have not received your HW. I will also electronically return your graded HW if you sent it to me electronically. If you send your HW via fax, then I may not be able to return your graded HW. If you need to contact me I would encourage you to e-mail me or contact me during my office hours. You can leave me a voice mail, but e-mail will get you a quicker response. I am only on campus occasionally. I may not be able to respond to an e-mail sent over the weekend until Monday.

## Deadlines:

Note that all graded items are due on Sundays by 10 pm. The Final Exam will be given on campus unless you have arranged a proctor. You must notify me in advance if you wish to use a proctor. **Unless you have contacted me well in advance of a deadline and received permission for an extension, any items not completed by their deadlines will receive scores of zero.** I will not grant extensions for activities, discussion posts or review sheet deadlines.

## Proctors:

If you plan to take the Final Exam somewhere other than Inver Hills, you will need to find a suitable proctor. A suitable proctor would be a *college test center employee, librarian, teacher, principal, or employer*. Please e-mail to me the name, position, address, e-mail address, and phone number of any proposed proctors well in advance of the Final Exam test deadline. I will need plenty of time to confirm details with the proctor before the due date.

## Technology:

- You will need daily access to a **high-speed internet connection** (DSL, cable modem, or equivalent).
- 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 will need to have **access to a printer** in order to print off copies of the activities and blank notes pages for the Video Lectures.
- You will want **access to a scanner** in order to scan completed activities back into the computer so you can submit them to the D2L dropbox. (The activities can also be faxed to me, but the dropbox method is my preference.)
- You may need to **upgrade to the latest version of Windows Media Player** in order to view my Video Lectures. You can download it by visiting [www.microsoft.com/windows/windowsmedia/player/11/default.aspx](http://www.microsoft.com/windows/windowsmedia/player/11/default.aspx)
- If you plan to submit **activities to the D2L dropbox**, they need to be in **pdf or doc** form (not jpg, tiff, or wps). **I prefer pdf or Word files that are all in one document (not multiple files submitted one for each page)**. Most scanners can scan to a pdf with multiple pages in a single document. If you don't know how to print to a pdf writer, you can scan in your HW and then copy and paste the image into a Word document to make it all one file. You can also go to the computer lab for assistance. Don't forget to write your name at the top of your HW too!
- **If you have a PC, then you should be able to play the Windows Media Video (wmv) lectures. If you have a Mac, then you will need to play the Flash format videos.** Both formats can be found on D2L. If you are experiencing any trouble getting these videos to work, you can access the video lectures from my faculty webpage: [http://faculty.inverhills.edu/cnaught/video\\_lectures.htm](http://faculty.inverhills.edu/cnaught/video_lectures.htm) (both formats are available). Otherwise, be prepared to find a PC computer that you can use for watching the Video Lectures. Under Content on D2L you will find a document with suggestions for what to do if you can't get the Video Lectures to work (no matter what kind of computer you have).
- 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 online to access course materials and take tests. **Internet disruptions or computer malfunctions are NOT acceptable excuses for missing deadlines.**

If you need technical assistance, please visit the Inver Hills computer lab (1<sup>st</sup> floor of the Library) for help.

## Video Lectures:

Online video lectures created by your instructor are available on D2L (under Content) and also on the instructor's webpage. These are meant to provide you with additional resources for learning the content of the course. You can 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. 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 HW activities to get a good idea of what to expect on the final exam. **NOTE: Some of the videos cover additional content that is not included in the Math 96 curriculum.** I will try to let you know what content you are not responsible for in the weekly e-mail updates and announcements on D2L. **To watch the videos on D2L, you will need to click on the video under Content, and then click on the small "undock" icon** (look for the second icon to the left showing two screens with an arrow between them in the small toolbar above the video screen). The video will then open in a new window after downloading. If you have a PC, then you should be able to play the Windows Media Videos (wmv). If you have a Mac, then you will need to play the flash format videos. Both are available on D2L and my faculty webpage. If you can't get the videos to play through D2L, then the easiest option would be to access the Video Lectures from my faculty webpage: [http://faculty.inverhills.edu/cnaught/video\\_lectures.htm](http://faculty.inverhills.edu/cnaught/video_lectures.htm). **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.**

## Other Policies:

Please note that on all activities and the paper-pencil Final, 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.

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.

### **Access/Accommodations:**

I would like to make sure that all the materials, discussions and activities that are part of the course are accessible to you. If you would like to request accommodations or other services, please contact me as soon as possible. It is also possible to contact the Disability Services Office, L-224; phone, 651/450-8628; TTY, 651/450-8369.

### **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.

The policies stated on this syllabus are subject to change at the discretion of the instructor. Any changes will be communicated by the instructor.

### **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 activities as soon as possible. I have no problem with students working together to complete activities; in fact, I strongly encourage it! I expect to see many discussion board posts, especially related to the activities, well before the deadline for these postings. Get activities done and submitted early in case of technological issues during submission. Check your feedback!
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 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 online office hours.
6. Get help on HW and activities with a free Peer Tutor. Work together with fellow students!
7. **SHOW YOUR WORK** on all activities, Tests, and the Final.
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 75%, so start early!
9. **DON'T FALL BEHIND!!!** (It bears repeating!)
10. Ask for help when you need it. Even though this is an online course, you are still encouraged and expected to be asking questions. Use the discussion board to ask your questions – chances are good that at least a few other students have the same questions, and you will be doing them a favor by asking.