MATH 021/022: Introduction to Algebra - Fall 2018 (Mastery Class)

Instructor: Cindi Goodmanemail: cyndia@unm.eduOffice: Adjunct Faculty Offices (Academics)Phone: 925-8600OFFICE HOURS: Mondays and Wednesdays 8:00-8:45 AM in my office
12:00-1;00 PM Math Center LRC

| Math 021 CRN 62360 | | | | | | |
|--------------------|-------------------|-----------------|---------------------|-----------------|--|--|
| Section | Class Time | Meeting Days | Meeting Location | MML Course Code | | |
| 501 | 10:05am – 11:45am | M/W | C-108 | goodman | | |

MATH 021 COURSE DESCRIPTION: This TWO CREDIT course includes the first half of a beginning algebra course including a review of basic arithmetic, real numbers, linear equations and inequalities, and an introduction to application problems. **Prerequisite:** *M*inimum ACCUPLACER score of 57-101 (Arithmetic), or math ACT score of 16. Co-requisite: MATH 193: Critical Thinking for Math.

Math 021 COURSE STUDENT LEARNING OUTCOMES:

Upon successful completion of the course, students will be able to:

- Add, subtract, multiply, and divide whole numbers, fractions, and decimals.
- Calculate simple percentages
- Find area, perimeter, circumference, volumes of various geometric figures.
- Add, subtract, multiply, and divide positive and negative numbers, including integers, fractions, and decimals.
- Use the correct order of operations.
- Correctly simplify a numerical expression.
- Solve linear equations and application problems involving linear equations in one variable.
- Solve application problems involving geometry.
- Solve simple linear inequalities.

| Math 022 CRN 62361 | | | | | | |
|--------------------|-------------------|-----------------|---------------------|-----------------|--|--|
| Section | Class Time | Meeting Days | Meeting Location | MML Course Code | | |
| 501 | 10:30am – 12:10pm | M/W | C-108 | goodman | | |

MATH 022 COURSE DESCRIPTION: This TWO CREDIT course includes the first half of a beginning algebra course including a review of basic arithmetic, real numbers, linear equations and inequalities, and an introduction to application problems. **Prerequisite:** Complete Math 021 with a C or better.

MATH 022 COURSE STUDENT LEARNING OUTCOMES:

Upon successful completion of the course, students will be able to:

- Graph simple linear equations.
- Calculate the slope of a line between two points.
- Find the rate of change.
- Find the equation of a line from pairs of points or a point and a slope.
- Correctly use the properties of integer exponents while multiplying and dividing common bases.
- Correctly use zero exponents.
- Correctly use negative integer exponents.
- Add, subtract, multiply, and divide polynomials.
- Understand common factors.
- Factor simple polynomials.

While Math 021/022 provide credit hours toward establishing a full-time load for financial aid purposes, and allows you to complete the prerequisites for subsequent Mathematics courses, these courses do not satisfy UNM core degree requirements.

COURSE MATERIALS:

Textbook: "Developmental Mathematics," 2nd edition, by Sullivan, Struve, Mazzarella.

Required: Appropriate MyMathLab (MML) access code (do not purchase a generic code, in this case the code is book specific). *It is recommended that you purchase the lifetime code.* You may purchase the 18-week access code for a lower price, but you *cannot* upgrade to the lifetime code once you purchase the restricted one. Course IDs are listed above for each course.

Optional: You may "upgrade" your access by purchasing a hardcopy of the book directly from Pearson for an additional cost (between \$50 and \$60 before tax).

There will be paper copies of the book on reserve for use in the library (you will not be able to take home the book from the library). The books on reserve are bound in individual sections of two to four chapters. *Be sure to request which chapter you need when checking out the book.*

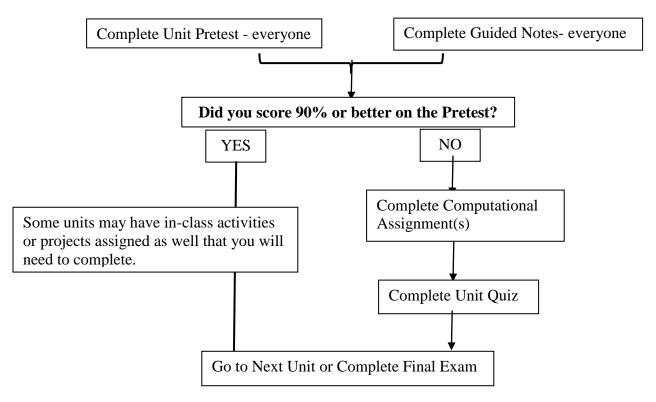
OTHER REQUIREMENTS:

- Reliable access to a computer or tablet and Internet. *A computer (laptop or desktop) is recommended.* Preferred browsers are Chrome, Firefox, or Safari. Preferred operating systems are Windows or Apple. Some applications in MyMathLab work best while using Google Chrome.
- Administrative rights to download free software or plug-ins or add-ons on the computer you plan to use for this course. The first time you login to the MyMathLab (MML) homepage, run the Installation Wizard to make sure you have all the appropriate software installed. *Also, make sure you are allowing popups.*
- Pearson account. If you have used any of the Pearson My Lab products before, you can use the same account you created the first time you used it. Otherwise, you can create an account when you register in MyMathLab (MML) for this class. Register by going to <u>mymathlab.com</u>.
- Access to UNM Learn. will use your UNM NetID to log into UNM Learn. You may access it directly via <u>learn.unm.edu</u>
- Scientific calculator. This cannot be an app on your cell phone or mobile device.
- Adobe Reader (a free download), preferably version 11.0 or better.

TIME FOR THIS COURSE: Plan to spend a *minimum* of 9 to 12 hours per week for this class. There is no guarantee you will pass if you dedicate this amount of time, you still need to learn the material and use your time wisely, but those who pass generally are the ones who spend the time needed to do the work to learn the material. *Also, a portion of your Participation Grade will be determined by the amount of time you are working on the course materials each week.*

HOW TO COMPLETE YOUR WORK FOR THIS CLASS:

The course topics are split into units, some units will have a Part A and a Part B. Below is how you can progress through the material:



PRETEST: At the beginning of each unit you will complete a pretest in MML. *The pretest is timed* (70 minutes) and must be taken in class or at designated times in the Math Center. You are given 2 attempts to demonstrate mastery of those concepts. If you score 90% or better on the Pretest, then, once you complete the Guided Notes for the unit and any possible activities or projects, you can move on to the next unit. If you do not score 90% or better on the Pretest, that just means there are concepts in the unit you do not yet know. Your Quiz score at the end of the unit will replace your Pretest score. There are 7 units in Math 021 and 7 units in Math 022. Each Pretest/Quiz is worth 10 points each. Your points will be your score as a percent shown in MML times 10.

GUIDED NOTES: These are notes you should print and complete using your text. After the first day of class, these notes will be posted in either UNM Learn or your instructor may upload them in the Document Sharing folder in MML. Completed notes will be due before you start the Computational

Assignment or before you take the Pretest for the next unit. If the notes come in Parts A and B, then Part A is due before you start working on the Part A Computational Assignment. Similarly, for Part B. Embedded in the Guided Notes will be the password to open the corresponding Computational Assignment in MML. Your score on each will be out of **10 points**.

BINDER: You should purchase a 3-ring binder in which to keep your completed and graded Guided Notes, Unit Activities, and Project(s). Your guided notes in particular can serve as reference while you are working on the computational assignments and when you are studying for the final exam. Also in your binder, keep the formula sheet you will create to use with your final exam as well as other important classwork.

COMPUTATIONAL ASSIGNMENTS: The Computational Assignments are where you practice the concepts you need to learn. Depending on how you did on your Pretest, there may be some problems already checked off as completed in the Computational Assignments. These are the ones you showed mastery of on your Pretest. For those you need to complete, linked to many questions are Skill Builder problems. If you are struggling with a particular problem, the program will direct you to simpler, Skill Builder problems to practice, helping pinpoint where you are having difficulty. Be sure to work the Skill Builder problems linked to those you struggle with.

It is a good idea to organize your notes and "scratch" work created while completing the Computational Assignments. You may want to do this in a spiral notebook or have a place in your binder for these papers.

You will need to score a 90% or better on the Computational Assignment, or on both Parts A and B if there are two parts, before the Unit Quiz will open.

QUIZZES: There is a Quiz for each unit. The quizzes are NOT timed, but you should count on only 2 attempts. The quiz for a unit will not open until you have scored 90% or better on the corresponding Computational Assignment(s). You need to score 90% or better on each Quiz in order to move on to the next Unit Pretest or to prepare for the final exam. Your Quiz score will replace your Pretest score for that unit. If you do not score 90% or better on the Quiz, the program will generate a Companion Study Plan that will provide you more practice on the concepts you missed. You will need to show mastery in the Study Plan (yes, that 90% again) before the second attempt on the Quiz will open. In order to show mastery in the Study Plan, you will need to complete the Quiz Me quizzes for the objectives you are practicing. **Each Pretest/Quiz is worth 10 points each**. Your points will be your score as a percent shown in MML times 10.

Sometimes MML will count a problem incorrect because you do not enter the answer in the form the program wants or for some other reason not immediately apparent. I will check your progress approximately every week and will review your unit pretests and quizzes to see if you can receive some points back. If you completed a Pretest or Quiz and your score is really close to that 90%, tell me and I will look at it sooner rather than later.

DO NOT consider any of the grades posted in MyMathLab as representing your actual grade.

PARTICIPATION AND PROGRESS: Participation includes

- <u>Attendance</u>. Show up to class!
- <u>Activity.</u> We will be doing a short group activity during some class meeting times.
- <u>Questions.</u> Bring your questions from the homework. My job is to help you learn the material, I cannot do that unless I know where you are misunderstanding or "not getting it."
- <u>Show Progress.</u> Come to class with Guided Notes done or partially done, come with questions from the Computational Assignments, come with a score of 90% on a Quiz to show you are ready for your next Pretest. I will also generate time and progress reports from your work in MML. *You need to work on this course throughout the week, not just during class time, so you can log your 9 to 12 hours per week.*

You will receive **10 Participation/Progress Points** for every class day you are present, ask questions, and show progress. Also, each In-Class Activity is worth **10 Participation/Progress Points**.

Number of Participation Points for your final course grade: Since this is a mastery class and some students need more time to master concepts they have not learned before, the number of possible points you earn in this category can vary. The possible points will *be 10 times the number of class days before you take the final exam plus 10 times the number of in-class activities we did* (whether you were in class or not). The first week of classes does not count in this total, for either possible or earned points. However, see below about missing class.

Absences: I do not require you to give me any sort of documentation for up to three (3) absences, they will be automatically excused. However, even if you miss class, you are still expected to show progress (see above). Also, be sure to ask about any in-class activity we did on the day(s) you missed. Once you have used up your three absences, you cannot have any more absences excused.

Here are the reasons I *may* drop you from the class:

- If you miss the first week of the semester or the first week after you register for the class.
- If you have 3 or more absences during the first three weeks of the semester.
- If you are not registered in MML and completing assignments by the end of the first week you are in the class.

Do not expect me to drop you. If you decide you cannot fulfill the requirements for this class and want to drop yourself, be sure to process a drop (either online or with a form at the Registrar's office).

FINAL EXAM: The final is a departmental exam that will test you over all, or nearly all, of the learning objectives for this course. You must take the final in class or in the Testing Center. You are allowed to take the final *only once*. You must score a 70% or better on the Final Exam to earn a passing grade in this class. *You must also have a 70% course average to earn a passing grade*, but if you have been attending class, completing assignments, and showing progress, this should not be a problem.

COURSE GRADE:

Your Course Grade will be determined by a weighted average of the grades you earn in each category listed below.

| ٠ | Participation and Progress | 20% |
|---|---|------------|
| ٠ | Guided Notes | 30% |
| ٠ | Unit Pretests/Quizzes in MML | 20% |
| • | Departmental Final | <u>30%</u> |
| | (Final for Math 022 is Cumulative for Math 021 and 022) | |
| | | |

TOTAL

100%

You must score at least a 70% on the final exam *and* have a course average of 70% to earn a passing grade in each course.

Depending on the grading option you have chosen, your final course letter grade will be determined as shown below.

| Letter Grade | Final Exam score AND Course Weighted Average |
|--------------|--|
| А | 70% or better AND 90% or better |
| В | 70% or better AND 80% to 89% |
| С | 70% or better AND 70% to 79% |
| CR | 70% or better AND 70% or better |
| NC | Any AND 69% or less |

SUPPORT: If you are struggling in this course, do not be afraid to ask for help!

- Ask My Instructor: Please use the Ask My Instructor button in MyMathLab. This button is available in the computational assignments and in the quizzes and sends a message to my email with a link to the question. Do not just send the link, tell me where in the problem you are struggling.
- Office Hours: See my office hours listed at the beginning of this syllabus. Feel free to come by or log in for online office hours or make an appointment to get help.
- Form study groups: You may work together with other members of our class.
- Free Tutoring: The Math Center at Valencia campus has free tutoring and open labs. Call 505-925-8907 for more information. CAPS on main campus also provides tutoring for which I can get documentation.
- Online Resources: In Blackboard Learn I will post various resources for you. Be sure to check out these resources!
- Student Services: There are various services provided in our Student Services Department. See below about equal access. Also, we have a testing center, advising, and career placement available: <u>Valencia Student Services</u>

OTHER IMPORTANT INFORMATION:

Equal Access: If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations

are provided in a timely manner. It is up to you to obtain documentation of a disability. If you are a Valencia campus student, contact Equal Access Services at Valencia Campus, Jeanne Lujan at (505)925-8910 or <u>Valencia Student Services</u>. If you are a main campus student you can receive documentation from the main campus Accessibility Resource Center. I will not guarantee accommodation without the appropriate documentation.

Collegial Behavior: Since I assume you are all adults, I will expect from you respectful adult behavior. Engaging in disruptive or unruly behavior could result in your being asked to leave, at which time you will be counted absent and a referral will be sent to the Associate Dean of Student Services. Continuing to behave in this way could result in your being dropped from the course. Disruptive or unruly behavior includes but is not limited to:

- texting or talking on your cell phone at any time during class,
- continually talking with your neighbor when we are not working on a group activity,
- working on homework from another class,
- reading material or watching media on a mobile device not related to this course or at a time that is inappropriate,
- refusing to participate in the class activities.

Plagiarism and Not Doing Your Own Work

It's a bad idea to <u>plagiarize</u> or to have other people do your work for you. Refer to the UNM Student Handbook (The Pathfinder) for UNM's policy on <u>Academic Dishonesty</u>.

Title IX Statement: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg. 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-titleix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

Important Semester Dates: (by 5 PM on date listed)

Last Day to AddFriday, ALabor DayMonday,Last Day to Drop w/out a gradeFriday, SFall BreakThursdayLast Day to Drop w/out Dean's PermissionFriday, NThanksgiving BreakThursdayLast Day to Drop with Dean's PermissionFriday, DLast Day to take the FinalWedneso

Friday, August 31 Monday, September 3 Friday, September 7 Thursday and Friday, October 11 and 12 Friday, November 9 Thursday and Friday, November 22 and 23 Friday, December 7 Wednesday, December 12