## Math 30 – Fall 2015 – 1867

Professor Tim Busken MW 1:15 - 3:10 pm

Email Address: tbusken@miracosta.edu Room: OC 3508

Course Website: timbusken.com/math30.html

**Final Exam Date:** Monday, December 14th 1:00 - 2:50 p.m.

### **Required Materials:**

MyMathLab will be required and is an online homework site. Our Course Code is "busken25062." Log-in to "mymathlab.com" to receive access. MyMathLab is often abbreviated as MML.

© Calculator. A scientific calculator is highly recommended, and is the only type of calculator allowed on tests. Graphing calculators are allowed in class and for homework but not allowed on the exams. The TI-30X IIS is recommended, but many other types are just as good. Ask me about possible calculators if you are concerned. I encourage you to check your arithmetic with the calculator and as your skills grow, to begin to use it less for simple computations. NOTE: There will be many assignments and tests which prohibit the use of all calculators.

Recommended Materials: Introductory and Intermediate Algebra. Robert Blitzer, 4th edition. The book may be bundled into a loose leaf format which makes putting it into a 3-ring binder easy and convenient. This course prepares students for Elementary Algebra Math 30. While the book is \$150 or so, it will last you for both Math 30 and 64. If you purchase the MML code, there is an e-book included so the physical book is not truly required. Some of you could do just fine without, others could probably purchase a 3rd edition for pretty cheap online.

**Office Hours:** I will be available to assist you before class and after class in our classroom.

**Prerequisites:** The pre-requisite is Math 20 or adequate score on the placement test.

<u>Disability Accommodations</u>: Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class are encouraged to contact DSPS (Disabled Students Programs and Services) as soon as possible to ensure that such accommodations are implemented in a timely manner. Their phone number is (760) 795-6658 and they are located in Building 3000 Student Services, room 3009. This is adjacent to parking lot 3C. If you have medical information you need to share with me, or if you have special arrangements in case the building must be evacuated, please make an appointment to discuss your accommodation.

<u>Course Description:</u> Designed to prepare students for intermediate algebra, this course teaches: simplifying algebraic expressions involving polynomials and rational terms; factoring; solving linear equations; solving quadratic and rational equations using factoring; analyzing graphs of linear equations; and solving applied problems.

# Student Learning Outcomes: Students will be able to

- 1. Make use of factoring techniques to perform algebraic computations with rational algebraic expressions, and be able to simplify the results.
- 2. Translate applied problems involving geometry into algebraic equations involving a variable and be able to solve the resulting equation.
- 3. Verify solutions to applied problems.

### **Course Objectives:** At the end of the course, students will be able to

- 1. Evaluate and simplify algebraic expressions using the rules of exponents, order of operations, combining the like terms, and the distributive property.
- 2. Add, subtract, multiply, and divide using either monomials or polynomials.
- 3. Solve a linear equation or inequality and check the solution.
- 4. Analyze verbal problems, model with appropriate equations, substitute the known values, solve the resulting equations, and interpret the result in the context of the problem.
- 5. Factor polynomials, and solve quadratic equations by factoring.
- 6. Simplify, multiply, and divide rational algebraic expressions
- 7. Graph first degree equations in two variables.
- 8. Write an equation for a given line; identify the slope of a line.

<u>Student Responsibilities:</u> Students are responsible for the materials necessary for the successful completion of this course. Mathematics is not a subject that is learned best by watching it is learned best by doing! A student enrolling in this course is responsible for all material covered in previous class days; no exceptions will be allowed.

- 1. It is your responsibility to turn off cell phones, pagers, and other electronic devices that can be distracting. You could just put it in "vibrate" mode as long as it is not a disturbance.
- 2. If you choose to drop the course, you can do this through SURF. If you do not complete this by the deadlines listed in the catalog, you will receive a failing grade.
- I expect you to take the time needed for this course. It is recommended to set aside at least 2 hours per hour in class, but some students may need more or less than this in order to succeed and understand the concepts.
- 4. Seek help when you need it. There are many ways to get help:
  - **a.** See me. I am available and willing to help students who choose to seek me out. Talk to me after class if my hours are not convenient for you & we may be able to set up a time.
  - **b.** Form peer or study groups. Meet with others to work on homework, worksheets, or study for tests. Often your fellow classmates are a great resource.
  - c. The MLC (Math Learning Center) offers Math Tutors if you need further assistance in the library in Oceanside or San Elijo. Please do not wait until test time to visit tutoring services if you get help at the moment you are confused or struggling, they can help straighten this up for you and clear up any misconceptions before it becomes ingrained.

# Grading: The following are the breakdowns.

| Homework (worksheets/online). | 10%      |
|-------------------------------|----------|
| Quizzes                       | 15%      |
| Mid-Term Exams (each)         | 20%, 25% |
| Cumulative Exam               | 30%      |
| TOTAL                         | 100%     |

### Grades are assigned by percentages:

| Perce | ent 9 | 90% + | 80-89.9% | 70-79.9% | 60-69.9% | Less than 60% |
|-------|-------|-------|----------|----------|----------|---------------|
| Grad  | le    | A     | В        | C        | D        | F             |

Attendance: Grades are not based on attendance. Attending class, arriving on time, being prepared with questions, and staying for the entire class period are critical for student success. Students who miss more than four hours of class may be dropped from the class without any additional warning other than this statement. During the first week of class, if you are not present at any time during any class meeting you may be dropped.

**Student Conduct:** Violations of the academic dishonesty policy will be treated quickly and harshly. A student found in violation may receive a failing grade on that assignment, and will have this infraction reported to the college. I do not tolerate academic dishonestly in any form. MiraCosta College requires reporting of ALL instances of academic dishonestly as Academic Integrity Violations. These include:

- ② looking at another persons exam during a testing situation
- copying another students homework and submitting it as your own
- bringing in and using notes or supplemental materials when none are allowed
- submitting work or information from an internet source as your own material (without noting it as a reference/resource)
- allowing another student to copy your work and submit it you will be punished exactly the same as the person who did the copying. To avoid this, dont give your work to someone else. Working together means sharing ideas and discussing concepts, and is acceptable; each student must independently write their own solutions and responses.

**Grade book** The grade book is located on mymathlab.

Homework/Quizzes: Online homework is due every other day and quizzes are typically completed at the beginning of class. Quizzes will be announced at least one class period in advance. No late/make-up quizzes are allowed. Illegible work will receive no credit which means that you may need to re-write your homework notebook before you turn it in. The lowest 2 scores from the online homework and the lowest quiz will be dropped from the grade calculations. As a bonus for homework, I will allow you to submit a folder with your written homework for up to 5% extra credit. Also, online homework can be finished after the deadline for a 20% decrease in points. It is much better for your grade to stay on top of the homework and have it done before it is due.

**Extra Credit:** Extra credit opportunities may be assigned throughout the term in addition to homework. Ill also give extra credit for any errors discovered in the textbook the first two students to contact me with the error (through email) will receive extra credit. The total for all extra credit will not exceed 5% of the overall course grade, and can only be used to better your grade if you earn 70% or higher for your overall course grade.

<u>Mid-Term Exams</u>: The two mid-term exams will each be for the full class period. No exam grades are dropped, but midterm exams may allow corrections. All academic dishonesty rules apply to all aspects of the course including exams and possible corrections. I will replace your lowest test percentage with the percentage you earned on the final exam, provided the final exam percentage is higher than the lowest midterm percentage.

Final Assessment: The cumulative, final exam is Monday, December 14th from 1:00 - 2:50 p.m.

## **How To Study Mathematics:**

- <u>Attend Class.</u> Sometimes life will present challenges that are clearly more important than Math 30. Do your best to attend each class session even though attendance is not a direct part of your grade. It may be difficult to learn the material on your own so seek help when a class is missed.
- Read the text. Before you come to class read over the textbook sections that will be discussed that day. Mathematics requires active processing of the information after each paragraph or two. Ask yourself questions about what you have read. DO NOT USE THE TEXTBOOK AS MERELY A LIST OF HOMEWORK PROBLEMS. The textbook is a tool that can enhance your learning; even if you don't like the way it is written you can still learn much from it.
- <u>Do the homework.</u> Before doing the homework try to read the book again (at least skim the section) to pick up major concepts which are covered. Review the notes and examples from class. It is best to attempt the homework as soon as possible after class. Study a little each day rather than "cramming". Do not immediately give up if you reach a problem that you can not solve quickly. Try to find a related example or review the concepts involved.
- <u>Prepare for the tests.</u> Study concepts rather than specific problems. Remember, you will not see the exact problem from the homework on a test, but the same concepts will be tested.
- <u>Seek conceptual understanding.</u> If you don't understand a concept, ask questions until it becomes clearer. I will do my best to explain things in different ways until the concept is grasped. If you don't seem to be "getting it", ask me to explain it a different way or to do another example. If you don't ask, then I won't know that you're struggling if no one has further questions, then I believe you understand (right or wrong), and we will move on. It is important that you do not allow yourself to be in a position of trying to catch up.
- <u>Keep a positive attitude:</u> Maybe you haven't always had the best experiences with mathematics, but give this class a chance. I may not be like many other instructors in your past and if you maintain the positive attitude even if the course becomes challenging it gives you a better chance to master these concepts. One way to help is to practice positive self-talk.

| Reactive (Negative) Language  | Proactive (Positive) Language   |
|-------------------------------|---------------------------------|
| I'll try.                     | I'll do it.                     |
| That's just the way I am.     | I can do better than that.      |
| There's not a thing I can do. | I have options for improvement. |
| I have to.                    | I choose to.                    |
| I can't.                      | I can find a way.               |

- <u>Give yourself the opportunity (time) to succeed.</u> Set aside enough time for you others in class may need more or less time than you, and depending on your preparation, you may need to devote extra time for review of the concepts or learning technology.
- <u>Time management.</u> It is important to realize and schedule time for this course. Creating an online calendar/schedule where you block out hours for studying, courses, work, etc., can help make sure you are budgeting enough time to succeed.
- <u>Practice Continual Review.</u> The text we use has an end of the chapter test but also has cumulative activities. I recommend both, so you keep reviewing the material from previous chapters to keep it fresh in your mind as we build new ideas.

You are required to start a new section on a fresh page. Again, as the syllabus states, you must make sure that the homework is legible. If I cannot read the pages, you will receive no credit.

### **Homework Notebook Guidelines:**

- Use pencil so that you may erase any mistakes.
- Start each section on a fresh page; the homework should look like you care.
- Include your name, Math 30, chapter and section for the homework, and the date.
- If there are any ripped edges from notebooks, trim them before you turn the assignment in.
- Neatness counts in the effect that if the homework is not legible, less credit or no credit will be given.
- You can ask me to look over your homework notebook at any time, and you can/should bring it to class so you can use it to ask questions from.
- Failing to follow the homework guidelines will result in lower points on your homework notebook.

I want to help you learn what you need to pass the course this term. Be committed to your goal!

- Teaching is more than telling; learning is not listening.
- How do you know what you know?
- Memorization is what we resort to when what we are learning makes no sense. Push yourself to memorize as little as possible and understand as much as possible.

| why biggest things to think about to push me towards success are: |
|---|
| ,, and  |
| My biggest time waster is:  |
| The minimum number of hours per week that I need to devote to     |
| studving math this term is:                                       |

Algebra Math30 Aug 2015 (Pacific Time)

| Algebra Math | , 0 |                          |     |                  |     |     | 2015 (Pacific Time) |
|--------------|-----|--------------------------|-----|------------------|-----|-----|---------------------|
| Sun          |     | Mon                      | Tue | Wed              | Thu | Fri | Sat                 |
|              | 26  | 27                       | 28  | 29               | 30  | 31  | 1                   |
|              | 2   | 3                        | 4   | 5                | 6   | 7   | 8                   |
|              | 9   | 10                       | 11  | 12               | 13  | 14  | 15                  |
|              | 16  | 17                       | 18  | 19               | 20  | 21  | 22                  |
|              | 23  | 24<br>(2.1 - 2.3<br>(ch1 | 25  | 2.4              | 27  | 28  | 29                  |
|              | 30  | 2.6                      | 1   | 3.1 quiz1 on ch2 | 3   | 4   | 5                   |

| Algebra Math | 30 |              |     |                  |     | Sep 2 | 2015 (Pacific Time) |
|--------------|----|--------------|-----|------------------|-----|-------|---------------------|
| Sun          |    | Mon          | Tue | Wed              | Thu | Fri   | Sat                 |
|              | 30 | 2.6          | 1   | 3.1 Quiz1 on ch2 | 3   | 4     | 5                   |
|              | 6  | No School    | 8   | 3.2, 3.3         | 10  | 11    | 12                  |
|              | 13 | 3.4          | 15  | 3.5              | 17  | 18    | 19                  |
|              | 20 | Quiz2 on ch3 | 22  | 4.2              | 24  | 25    | 26                  |
|              | 27 | 4.3          | 29  | 4.4              | 1   | 2     | 3                   |

Oct 2015 (Pacific Time) Algebra Math30

| Sun | Mon                          | Tue | Wed      | Thu | Fri | Sat |
|-----|------------------------------|-----|----------|-----|-----|-----|
|     | 7 28                         | 29  | 4.4      | 1   | 2   | 3   |
|     | Review                       | 6   | Ch 3&4   | 8   | 9   | 10  |
|     | 5.1, 5.2                     | 13  | 5.3, 5.4 | 15  | 16  | 17  |
|     | 5.5, 5.6                     | 20  | 5.7      | 22  | 23  | 24  |
| 2   | 5 26<br>6.1<br>quiz 3 on ch5 | 27  | 6.2, 6.3 | 29  | 30  | 31  |

Nov 2015 (Pacific Time) Algebra Math30 Sun Thu Sat Mon Tue 6.4, 6.5 No School review Veteran's Day ch 5&6 midterm 7.1, 7.2 

Algebra Math30 Dec 2015 (Pacific Time)

| Algebra Math30 |                               |     |        |     | Dec | 2015 (Pacific Time) |
|----------------|-------------------------------|-----|--------|-----|-----|---------------------|
| Sun            | Mon                           | Tue | Wed    | Thu | Fri | Sat                 |
| 29             | 7.6                           | 1   | 7.7    | 3   | 4   | 5                   |
| 6              | review                        | 8   | review | 10  |     | 12                  |
| 13             | [final exam<br>1pm - 1 - 2:50 | 15  | 16     | 17  | 18  | 19                  |
| 20             | 21                            | 22  | 23     | 24  | 25  | 26                  |