MAT*K172 # College Algebra **Spring 2016**

MWF 7:40 am – 8:40 am E 206

INSTRUCTOR: Dr. Kelly Molkenthin (pronounced "molk-in-tine")
Office: C 234, 860-215-9455
Email: kmolkenthin@trcc.commnet.edu

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Office Hours: Mondays 11:00 am – 12:00 pm
Tuesdays 10:50 am – 11:50 am
Wednesdays 11:00 am – 12:00 pm
Thursdays 10:50 am – 11:50 am
and by appointment.

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REQUIRED MATERIAL:

- *MyMathLab* access code
- TI-83 or TI-84

RECOMMENDED MATERIAL

- *College Algebra, 4th Edition*. Beecher. Addison Wesley, 2012. ISBN # 9780321724847

CALCULATORS: Calculators will be needed for many homework problems and it is REQUIRED that you bring one to **each class** and **every quiz**. Cell phones may NOT be used as calculators. It is highly recommended that you have a **TI-83** or **TI-84**.

COMPUTERS: Online homework will be assigned regularly and will be completed using MyLab and Mastering at **www.pearsonmylabandmastering.com**. If you did not purchase a book which has an access code bundled with it, you will have to purchase an access code separately.

To register for MAT 172 - College Algebra Spring 2016:

1) Go to www.pearsonmylabandmastering.com and click on "**Get Registered**" in the *Students* tab.

2) Be sure you have the information needed then select "**OK! Register now**".

3) Enter the course ID, **molkenthin25898**, then click on ***Continue*.**

4) If you already have a Pearson account (you've used MyMathLab, MyITLab, MyPsychLab,…or Course Compass before), enter your **username** and **password** and click ***"Sign In"***.

   If you do not yet have a Pearson account, click on ***"Create"*** under "Create a Pearson Account" and complete the required fields.

   ****Be sure to remember/record your user name and password. Forgetting your user name and/or password is NOT a valid reason for not completing assignments.**

5) Select an access option.
   - Use the access code that came with your textbook or that you purchased separately from the bookstore.
   - Buy access using a credit card or PayPal account
   - Get 14 days temporary access (the link is at the bottom of the screen). If you choose 14 day temporary access, you will need to purchase full access prior to the end of the 14 day access.

6) From the conformation page, select **"Go To My Courses"**

7) On the My Courses page, select the course tile **MAT 172 - College Algebra Spring 2016** to start your work.

To sign in later:

1) Go to www.pearsonmylabandmastering.com
2) Select **"Sign In"**
3) Enter your Pearson account **username** and **password** and **Sign In**
4) Select the course tile **MAT 172 - College Algebra Spring 2016**

To upgrade temporary access to full access:

1) Go to www.pearsonmylabandmastering.com
2) Select **Sign In**
3) Enter your Pearson account **username** and **password** and **Sign In**
4) Select **Upgrade access** from the course tile **MAT 172 - College Algebra Spring 2016**
5) Enter and access code or purchase with a credit card or PayPal account

**** Technical support** for the company is at 1-800-677-6337, Monday through Friday, 9 am – 6 pm.

GRADING:		
	5 Exams:	375 points (75 each)
	Final Exam (cumulative):	150 points
	Weekly Quizzes:	200 points (20 each)
	MyLab	100 points
	Attendance and Participation:	50 points
	Total:	875 points

Your final grade is the total number of points you have received divided by the total possible number of points you could have earned. Final grades will be determined using the scale below:

A → 93% and above	**A-** → 90 - 92%	
B+ → 87 - 89%	**B** → 83 - 86%	**B-** → 80 - 82%
C+ → 77 - 79%	**C** → 73 - 76%	**C-** → 70 - 72%
D+ → 67 - 69%	**D** → 63 – 66%	**D**- → 60 – 62%

PREQUISITE*: MAT* K137* or *MAT* K137S* with a "C" grade or better or appropriate placement through multiple-measures assessment process.

The prerequisite for moving onto MAT 186(PreCalculus) is a "C" grade or better in this course.

EXTRA CREDIT: There will be **no** "extra credit" assignments for this course.

ATTENDANCE: Attendance is required and will be taken for each class. An absence is excused ONLY for valid reasons (to be determined by the instructor) and if notification is given **PRIOR** to a missed class (via email, phone message – **not** word of mouth from another student). **All absences reported by phone or reported to instructor in person **must** be followed up with an email, or they will be considered unexcused. Oversleeping, vacations and "colds" are examples that are **not** valid reasons for an absence. Do you best to not miss ANY classes!! Excused absences will not affect your attendance and participation grade, unexcused absences will lower your attendance and participation grade. Students are allowed a maximum of 2 excused absences per semester.

Also, if you miss a class it is **YOUR** responsibility to get the class notes from another student (refer to your class list) and **BE PREPARED** for the next class meeting (this includes taking the scheduled tests/quizzes).

Note: Class BEGINS at 7:40 pm. It is expected that you will be in your seat and ready to go at the start of class time. Students arriving after the start of class time will lose attendance points for that class. Excessive "lateness" will not be tolerated, it is disruptive to both the instructor and the class. Excessive lateness will result in classroom doors being locked at the start of class time. Also, students leaving class prior to the scheduled end time will lose attendance points for that class unless arrangements have been made with the instructor prior to the class in which the student needs to leave early.

CLASS CANCELATION: In the unlikely event that a class needs to be canceled by the instructor, a notice will be placed on the classroom door prior to the start of class. If time permits, you will be notified by the instructor via email as soon as possible prior to the canceled class.
For college cancelations, pay attention to the radio & TV announcements, call the college's main phone number, 860-215-9000, or visit the college's home page, www.trcc.commnet.edu. It is also suggested all students register for **The myCommnet Alert Notification System**. This system is used to deliver important information to students, faculty, and staff regarding weather-related class cancellations. The system delivers both email messages, and text messages over cellular phones to those individuals who are registered. To register, log on to your myCommnet account at http://my.commnet.edu/ and follow the link to myCommnet Alert. Please do not email the instructor regarding weather related cancelations.

HOMEWORK AND QUIZZES: Homework (both from the text and online) will be assigned for every section we cover in the text. It is expected that you complete the online assigned problems by the due date and time on the assignment, and the homework in the text by the next class meeting.

For the online homework: For most assignments, you will have one week from the date in which the assignment was posted to complete your assignment for **full credit**. Once due dates have passed, assignments will remain open until the day of the exam which covers that material. This will give you the opportunity to complete any missed problems for **½ credit**. **Note: Deadlines for online homework will not go beyond the exam date/time for the exam that covers that material. All online assignments MUST be completed prior to taking the exam on that material. Watch your MyLab due dates carefully. Most assignments are due by 11:59 pm on due dates, with the exception of any assignment due on an exam day. In this case, the assignment is due at the start of class, 7:40 am.

For text homework: Keep a separate notebook for your text homework. It is expected homework from your text is completed, or at least reasonably attempted, by the next class meeting. BE SURE TO CHECK YOUR ANSWERS IN THE BACK OF THE TEXT. If you check the problem in the back of the text and it is not correct, re-do the problem. If you are struggling with the assignment, you need to seek out help either from your instructor or the tutor center ASAP!
Our expectation is that you are spending 2-3 hours of reading and doing homework for this class for every "academic" hour we meet in class. We meet 3 "academic" hours per week, therefore you should expect to spend ***at least* 6 - 9 hours per week** working on material for this class outside of our class meetings, every week!

***NOTE:** Class time is reserved for presentation of material. Homework questions will be answered before class begins, during office hours or at scheduled meetings, not during class time.

Your weekly in-class quizzes will be testing the concepts emphasized from class and your homework assignments. **There are no make-ups for missed quizzes**. You will be given at least 12 quizzes throughout the semester, only your top 10 scores will count toward your final grade.

EXAMS: You will have three in-class exams and one two hour final exam. Exams are scheduled for the following dates:

- **Exam 1: Wednesday, February 17**
- **Exam 2: Wednesday, March 9**
- **Exam 3: Friday, April 1**
- **Exam 4: Friday, April 15**
- **Exam 5: Wednesday, May 11**
- **Final Exam: Part 1 – Monday, May 16, Part 2 – Wednesday, May 18**

This may change (but hopefully not), depending on how we are doing. Make-ups for exams will be given only in **EXTREME** circumstances and if **PREVIOUS** arrangements are made. All make-up exams must be completed prior to the next class meeting. No exam will be administered prior to the date/time of the scheduled exam and **if you miss an exam, you will receive a grade of 0 (zero)**.

COMMUNICATION: Verbal communication with the instructor regarding missed classes, quiz make-ups, special accommodations, etc. **must** be followed up with an email (kmolkenthin@trcc.commnet.edu) as soon as possible. This is essential!

RETENTION OF PAPERS: Students are expected to retain all graded work until final grades are received.

ACADEMIC DISHONESTY: Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. It is expected that **YOU** complete all your assigned homework and project. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any quiz or exam. Academic Misconduct is punishable in a number of ways. The minimum penalty is a zero on the assignment where the cheating took place. Other penalties include a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Dean of Students. Do not let yourself come under the suspicion of academic dishonesty.

COURSE OBJECTIVES: This course is a thorough and rigorous algebra course that strengthens the proficiency with algebraic skills and the conceptual understanding needed to be successful in the Calculus sequence. The topics include: sets, polynomial, exponential, logarithmic and rational functions, rational exponents, conic sections, right triangle trigonometry, matrices, polynomial, exponential, logarithmic and radical equations, linear and quadratic inequalities, absolute value equations and inequalities, linear and nonlinear systems.

Upon Completion of the course, the student should be able to:

1) Define absolute value, find distances on the number line and the coordinate plane.

2) Simplify expressions with rational exponents, write them in radical form, simplify, combine and rationalize radical expressions.

3) Solver linear and quadratic inequalities, absolute value equations and inequalities, express answers in interval form.

4) Perform operations on complex numbers, conjugates, represent complex numbers graphically.

5) Perform operations on radical expressions, rational exponents, solve radical equations.

6) Find the domain and range of function's, combine functions, identify even and odd functions, graph piece-wise functions, find composition of functions, inverse and transforms of functions.

7) Find the characteristics of polynomial functions, solve polynomial equations, find zeros (roots) and x-intercepts of polynomials, apply the Fundamental Theorem of Algebra, The Remainder Theorem, The Factor Theorem, analyze end behavior.

8) Graph rational functions, find vertical, horizontal and slant asymptotes.

9) Graph exponential and logarithmic functions, use properties of exponents and logarithms, solve exponential and logarithmic equations.

10) Solve systems of linear equations in several variables

ACCOMMODATIONS: Students with learning disabilities should contact the Learning Specialist, Chris Scarborough at 860 892 5751 or cscarborough@trcc.commnet.edu as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Matt Liscum at (860) 383-5240 or via email at mliscum@trcc.commnet.edu to facilitate accommodations. All testing/quizzing accommodations MUST be discussed with the instructor in a timely manner. If accommodations are needed, arrangements must be made *at least* one to two class meetings prior to any scheduled test/quiz for which the accommodations are needed.

CELL PHONE POLICY: All cell phones must be turned OFF or MUTED before entering the classroom and properly placed in a bag or pocket (not left on a desk). Any cell phone ringing or beeping during a class is inappropriate and unacceptable. Any cell phone use is also inappropriate and will not be tolerated. Students found using cell phones in any way in class will lose their attendance points for that class period. Cell phones may NOT be used for calculators in class. All cell phones must be completely out of sight for all quizzes and exams. Any visible cell phone during a quiz or exam will result in a 0 for that quiz or exam. If a 0 is received on a quiz due to a cell phone issue, that quiz will not be dropped and will count in your final grade.

The key to success in this course is to attend every class and do all the homework when it is assigned. Ask questions when you have them, either in class or in my office. You will find it much easier to learn the new topics if you consistently keep up with the course material and homework problems!

The instructor has the right to change/modify this syllabus at any time with proper notification to the class

COURSE CONTENT - MAT* K172, Spring 2016

Ch 1 – Graphs, Functions and Models (1.1 – 1.6)

Ch 2 – More on Functions (2.1 – 2.5)

Ch 3 – Quadratic Functions and Equations; Inequalities (3.1 – 3.5)

Ch 4 – Polynomial Functions and Rational Functions (4.1 – 4.6)

Chapter 5 – Exponential Functions and Logarithmic Functions (5.1 – 5.6)

Chapter 6 – Systems of Equations (6.1, 6.2)

IMPORTANT DATES

- Friday, 1/29 – Quiz #1
- Wednesday, 2/3 – Quiz #2
- Wednesday, 2/10 – Quiz # 3
- Friday, 2/12 – TRCC Closed, no classes!
- Monday, 2/15 – TRCC Closed, no classes!
- **Wednesday, 2/17 – Exam #1**
- Wednesday, 2/24 – Quiz #4
- Wednesday, 3/2 – Quiz #5
- **Wednesday, 3/9 – Exam #2**
- Wednesday, 3/16 – Quiz #6
- Monday, 3/21 – Friday, 3/25: TRCC SPRING BREAK
  MAT 172 WILL MEET on Monday 3/21 & Wednesday 3/23!

- Friday, 3/25 – TRCC Closed, no classes!
- Wednesday, 3/30 – Quiz #8
- **Friday, 4/1 – Exam #3**
- Wednesday, 4/6 – Quiz #9
- Wednesday, 4/13 – Quiz #10
- **Friday, 4/15 – Exam #4**
- Monday, 4/18 – Friday, 4/22: TRMC SPRING BREAK
  MAT 172 WILL NOT MEET this week UNLESS necessary!
- Wednesday, 4/27 – Quiz #11
- Wednesday, 5/4 – Quiz # 12
- **Wednesday, 5/11 – Exam #5**
- **Monday, 5/16 – Final Exam Part 1**
- **Wednesday, 5/18 – Final Exam Part 2**