Lake Tahoe Community College Math 154A – Intermediate Algebra Spring 2011 – Section 1 - Hybrid

Instructor: Katie Larkin **Email:** larkin@ltcc.edu **Time:** T/Th 10:00 –11:50am

Room: D121

COURSE CONTENT

This course is a continuation of Math 152B. The course includes quadratic equations and functions and their applications, non-linear inequalities, operations and composition of functions, conic sections: parabolas, circles, ellipses and hyperbolas, linear and non-linear systems of equations, inverse functions, exponential functions, logarithms, sequences and series, and the Binomial Theorem.

MATERIALS

Required: MyMathLab Access Code. This code can either be purchased online or in the bookstore. The access code comes with complete online access to the textbook as well as other study guides. A scientific calculator is required. Graphing calculators will not be allowed on any quizzes or exams.

Optional: Textbook – <u>Beginning and Intermediate Algebra</u>, 4th ed., by Martin-Gay.

STUDENT LEARNING OUTCOMES (SLOs)

- 1. Apply the course topics to real-world situations.
- 2. Sketch and interpret the graphs of functions and relations introduced in intermediate algebra.
- 3. Simplify mathematical expressions into forms more amenable to analysis.
- 4. Provide solutions to equations using methods from intermediate algebra.

COURSE WORK

- Attendance (5%): Attendance will be taken at the start of class. You will get 2 points for arriving on time and leaving when the class is dismissed. If you're late or leave early, you will receive 1 point and if you are absent you will receive 0. Please see me if you have to miss class.
- Homework (15%): All homework will be assigned and completed in MyMathLab. You may attempt each question up to 3 times. All homework is due each Sunday by midnight. No late assignments will be accepted for course credit. There are duplicate versions of each homework assignment that will never close. You can attempt problems after the due date and your work will not affect your grade. It is meant to serve as a study and review aid throughout the quarter.
- Quizzes (10%): All quizzes will be assigned and completed in MyMathLab. All quizzes are due each Sunday by midnight. No late assignments will be accepted for course credit. Before taking the quiz, make sure that you're very comfortable with the relevant material and have done the homework. There are many study tools within MyMathLab including videos for each section take advantage of these resources.
- Midterms (45%): Three midterm exams, each worth 15% of your final grade, will be given in class. If a student has a conflict, they must notify me BEFORE the day of the exam so that an alternative date can be made. ABSOLUTELY NO MAKE-UPS WILL BE GIVEN without a valid excuse.
- Cumulative Final Exam (25%): The MANDATORY final exam will be given on Tuesday, June 21st from 11:00a-12:50p. No make-ups will be given.

All exams and assignments will be graded on the following straight scale:

A: 90 - 100%, B: 80 - 89%, C: 70 - 79%, D: 60 - 69%, F: Below 60%

Note: If you take the course P/NP, keep in mind that a C or above is passing (P).

MyMathLab

Access online homework and quizzes via MyMathLab (www.coursecompass.com). The Course ID is larkin01906. You can also access your running grade on this site. More detailed description of this site to be given in class.

COMPUTERS

Computers are available for your use in the following locations on campus:

- Writing Across the Curriculum Center (Rm. 201): Mon Th 9 6, Fri 11 2, Sat 11 3.
- Math Success Center (MSC) (Rm. 201): Mon Th 9 6, Fri 10 2, Sat 11 1.
- Open Labs in the D-wing which have available times posted by the door of each lab.

CLASSROOM RULES

Cell phones and any other "noise-makers" (ipods, mp3 players, etc.) must be turned OFF (not on vibrate, OFF) before entering the classroom and must remain stowed for the entire lecture. Disruptive activity during class will not be tolerated. While I am lecturing or other classmates are asking questions, you should not be talking. If you are consistently disruptive during class, you will be suspended from the class for up to 2 days.

HOW TO SUCCEED IN THIS COURSE

- **Keep up with the work!** Math is a difficult subject; it is **imperative** that you keep up with the work in this class! Pay attention to the schedule and don't miss assignments.
- Come to class prepared! Before each class you should read the appropriate material (see schedule). You should also be sure to review previous lectures and bring any homework questions to class.
- Make use of the Math Success Center! I do not have office hours, therefore it is imperative that you get the most out of my lectures and go to the Math Success Center if you're having any trouble at all and need some assistance. The Math Success Center, staffed with knowledgeable tutors, is located in room 201 and is open from M-TH from 9-6, FRI 10-2, and SAT 11-1. There are also computers available for use there.
- Form study groups! They can be a great source of help! You can work together on homework assignments, but you need to submit the answer you believe is correct.

IMPORTANT DATES

- Apr 15: Last day to drop with a full refund
- Apr 29: Last day to drop with no record or declare P/NP
- May 20: Last day to drop with a 'W'

STUDENTS WITH DISABILITIES

If you have a certified learning disability that may affect your performance in this class, be sure to discuss your special needs with me during the first week of class. Learning disabilities will be accommodated.

ACADEMIC INTEGRITY

Cheating will be defined as but not limited to: (1) using any method to copy another's work on an exam or final (2) directly copying another student's homework assignment (3) using any method other than your own honest efforts to complete exams or the final.

The following activities are NOT cheating: (1) collaborating with other students to complete homework assignments (2) working with math tutors or academic coaches to complete homework assignments (3) working with other students to study for exams or the final.

Disciplinary actions for cheating in this class: Cheating will result in a grade of zero on the item on which the cheating occurred. The worst thing about cheating, however, is compromising your character for such a small reward.

TENTATIVE SCHEDULE

| Math 154A – Spring 2011 – Larkin | | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Week Commencing | Topics Covered | Section in Text |
| 04/04/11 | Solving Linear Systems of Equations with Three Variables; Reviewing Function Notation and Graphing Nonlinear Functions | 4.4, 8.2 |
| 04/11/11 | Graphing Piecewise- Defined Functions and Shifting and Reflecting Graphs of Functions; Solving Quadratic Equations by Using Quadratic Methods; Nonlinear Inequalities in One Variable | 8.3, 11.3 - 11.4 |
| 04/18/11 | Quadratic Functions and Their Graphs; Further Graphing of Quadratic Functions | 11.5 - 11.6 |
| 04/25/11 | The Algebra of Functions & Composite Functions; Inverse Functions | 12.1 - 12.2 |
| 05/02/11 | Exam 1 (4.4, 8.2 - 8.3, 11.3 - 11.6, 12.1 - 12.2) - Tuesday, 5/3/11 Exponential Functions | 12.3 |
| 05/09/11 | Logarithmic Functions; Properties of Logarithms | 12.4 - 12.5 |
| 05/16/11 | Common Logarithms, Natural Logarithms, Change of Base; Exponential and Logarithmic Equations and Applications | 12.6 - 12.7 |
| 05/23/11 | Exam 2 (12.3 - 12.7) - Tuesday, 5/24/11 The Parabola and the Circle; The Ellipse and the Hyperbola | 13.1 - 13.2 |
| 05/30/11 | Solving Nonlinear Systems of Equations; Sequences | 13.3 - 14.1 |
| 06/06/11 | Arithmetic and Geometric Sequences; Series | 14.2 - 14.3 |
| 06/13/11 | Exam 3 (13.1 - 13.3, 14.1 - 14.3) - Tuesday, 6/14/11 Partial Sums of Arithmetic and Geometric Sequences; The Binomial Theorem | 14.4 - 14.5 |
| 06/20/11 | Cumulative Final Exam - Tuesday, 6/21/11 - 11:00a-12:50p | |

Note: Schedule may change slightly over the course of the semester.