

Lake Tahoe Community College
Math 102 – A Survey of Mathematical Ideas
Spring 2011 – Section 1

Instructor: Katie Larkin
Email: larkin@ltcc.edu
Time: T/Th 4:00 – 5:50pm
Room: A211

COURSE CONTENT

This course provides a survey of a variety of branches of mathematics including inductive and deductive reasoning, probability, statistics, the mathematics of finance, exponential growth and decay, and an introduction to trigonometric functions.

MATERIALS

Required: Textbook – Mathematics, A Practical Odyssey, 7th ed., by Johnson/Mowry
Scientific calculator

STUDENT LEARNING OUTCOMES (SLOs)

1. Apply combinatorics and the rules of probability to real life situations.
2. Analyze statistical information and the 'Normal' distribution to make conclusions based on data
3. Incorporate the mathematics of finance to be consumer-wise.
4. Utilize trigonometric formulas to solve problems involving triangles.
5. Develop exponential growth and decay models.

COURSE WORK

- **Attendance (5%):** Attendance will be taken at the start of class. Arriving late and leaving early will result in points deducted. If you feel you have a valid reason for missing or being late to class, please see me before or after class. Please do not disrupt the lecture once class has begun.
- **Homework (15%):** You must do all the assigned homework problems. I will randomly select 4 problems and grade them for accuracy (2 pts each). You will get 2 points for completion of the problem set. You must show your work to get credit. I will only accept late assignment up to one class period past due date for 20% reduction in grade.
- **Quizzes (10%):** Quizzes will be completed in class. Quizzes will not always be announced and no make-ups will be given unless arrangements have been made with me PRIOR to the day the quiz is given. No late assignments will be accepted for course credit.
- **Exams (45%):** Three exams, each worth 15% will be given. 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 submitted to me PRIOR to exam day.
- **Final Exam (25%):** The MANDATORY final exam will be given on Tuesday, June 21st from 4-5:50pm in A211. 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).

GradeSource

Your grade will be available online at www.gradesource.com. Go to 'Student Reports' > Instructor name: Larkin > Click on class: Math 102 > Your secret number will be on your first quiz.

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 10 – 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 LECTURE SCHEDULE

Math 102 – Spring 2011 – Larkin		
Day	Topics Covered	Section in Text
04/05/11	Dimensional Analysis, Perimeter & Area	Appendix E, 8.1
04/07/11	Right Triangle Trigonometry	8.5
04/12/11	Simple Interest, Compound Interest	5.1, 5.2
04/14/11	Annuities	5.3
04/19/11	Amortized Loans	5.4
04/21/11	Exponents and Logarithms	10.0A, 10.0B
04/26/11	Logarithms	10.0B
04/28/11	Exponential Growth and Decay	10.1, 10.2
05/03/11	Sets and Set Operations, Review for Exam 1	2.1
05/05/11	EXAM 1	
05/10/11	Permutations and Combinations	2.3, 2.4
05/12/11	Probability	3.1, 3.2, 3.3
05/17/11	Combinatorics & Probability, Conditional Probability	3.4, 3.6
05/19/11	Conditional Probability	3.6
05/24/11	Expected Value, Review for Exam 2	3.5
05/26/11	EXAM 2	
05/31/11	Population, Sample, & Data, Measures of Central Tendency & Dispersion	4.1, 4.2, 4.3
06/02/11	Normal Distribution	4.3, 4.4
06/07/11	Normal Distribution, Review for Exam 3	4.4
06/09/11	EXAM 3	
06/14/11	Review for Final Exam	Review
06/16/11	Review for Final Exam	Review
06/21/11	CUMULATIVE FINAL EXAM Tuesday, 6/21, 4:00-5:50pm	

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

HOMEWORK SCHEDULE

Section in Text	Homework	Due Date
Appendix E	#3, 6, 7, 11, 13, 14, 15, 16	4/14/2011
8.1	#2, 5, 7, 9, 11, 19, 23, 24, 33	4/14/2011
8.5	#1, 5, 9, 21, 27, 30, 35	4/21/2011
5.1	#3, 7, 11, 17, 23, 31, 37, 41a-d	4/21/2011
5.2	#5, 7, 13, 19, 25, 33, 35, 37, 41	4/21/2011
5.3	#1, 5, 7, 13, 33, 35	4/21/2011
5.4	#5, 9, 12, 16, 22	4/28/2011
10.0A	#1, 3, 5, 9, 13, 19, 25, 27, 39, 43, 47	4/28/2011
10.0B	#1-31odd, 33-49 EOO	4/28/2011
10.1	#1, 3, 13, 23	5/5/2011
10.2	#1, 9, 19, 27	5/5/2011
2.1	#2, 7, 17-26, 27	5/19/2011
2.3	#2, 5, 16, 22, 23, 33, 43	5/19/2011
2.4	#1, 15, 18, 25, 30, 33	5/19/2011
3.2	#1, 2, 5, 7, 9, 11, 13, 21, 45, 47, 61, 68, 70, 71, 72	5/19/2011
3.3	#1, 3, 9, 13, 27, 30, 40, 48	5/26/2011
3.4	#5a-c, 7, 15, 19-26	5/26/2011
3.6	#3, 9, 15, 23, 41, 43, 46, 57-60, 63	5/26/2011
3.5	#13, 19, 33, 34, 35, 37	5/26/2011
4.1	#1, 8, 16, 17	6/9/2011
4.2	#2, 11, 17, 21, 28	6/9/2011
4.3	#1a, 7, 13, 15, 17	6/9/2011
4.4	#1, 3, 5, 6, 7, 8, 9, 11, 13, 17, 20, 23, 24	6/16/2011