# Lake Tahoe Community College <br> Math 102 - A Survey of Mathematical Ideas <br> Fall 2010 - Section 1 

Instructor: Katie Larkin
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Phone: 541-4660 x508
Time: T/Th 10:00-11:50am
Room: E106

## 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, $6^{\text {th }}$ 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 ( $\mathbf{1 5 \%}$ ): You must show your work to get credit. You will receive half credit for completion of all problems and half credit for selected problems. I will only accept late assignment up to one class period past due date for $20 \%$ reduction in grade.
- Quizzes ( $\mathbf{1 0 \%}$ ): Quizzes will be completed in class. Quizzes will not always be announced and no makeups 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 MAKEUPS 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, Dec. $7^{\text {th }}$ from 11am12:50pm. 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:

- Learning Assistance Center (LAC) (Rm. 201): Mon - Th 10 - 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 11-3. 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

- Oct 1: Last day to drop with a full refund
- Oct. 15: Last day to drop with no record or declare P/NP
- Nov. 5: 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 102 - Fall 2010 - Larkin |  |
| :---: | :---: | :---: |
| Day | Topics Covered | Section in Text |
| 09/21/10 | Dimensional Analysis, Perimeter \& Area | $\begin{gathered} \hline \text { Appendix E } \\ 8.1 \end{gathered}$ |
| 09/23/10 | Trigonometry, Simple Interest | $\begin{aligned} & 8.5 \\ & 5.1 \end{aligned}$ |
| 09/28/10 | Compound Interest | 5.2 |
| 09/30/10 | Annuities | 5.3 |
| 10/05/10 | Amortized Loans | 5.4 |
| 10/07/10 | Exponents and Logarithms | $\begin{aligned} & \hline 10.0 \mathrm{~A} \\ & 10.0 \mathrm{~B} \end{aligned}$ |
| 10/12/10 | Logarithms | 10.0B |
| 10/14/10 | Exponential Growth and Decay | $\begin{aligned} & 10.1 \\ & 10.2 \end{aligned}$ |
| 10/19/10 | Sets and Set Operations, Review for Exam 1 | 2.1 |
| 10/21/10 | EXAM 1 |  |
| 10/26/10 | Permutations and Combinations | $\begin{aligned} & 2.3 \\ & 2.4 \end{aligned}$ |
| 10/28/10 | Probability | $\begin{aligned} & \hline 3.1 \\ & 3.2 \\ & 3.3 \end{aligned}$ |
| 11/02/10 | Combinatorics \& Probability, Expected Value | $\begin{aligned} & 3.4 \\ & 3.5 \end{aligned}$ |
| 11/04/10 | Conditional Probability | 3.6 |
| 11/09/10 | Review for Exam 2 | 3.6 |
| 11/11/10 | EXAM 2 |  |
| 11/16/10 | Population, Sample, \& Data, Measures of Central Tendency \& Dispersion | $\begin{aligned} & 4.1 \\ & 4.2 \\ & 4.3 \end{aligned}$ |
| 11/18/10 | Normal Distribution | $\begin{aligned} & 4.3 \\ & 4.4 \end{aligned}$ |


| $11 / 23 / 10$ | Normal Distribution, Review for Exam 3 | 4.4 |
| :--- | :--- | :---: |
| $11 / 25 / 10$ | Happy Thanksgiving |  |
| $11 / 30 / 10$ | EXAM 3 | Review |
| $12 / 02 / 10$ | Review for Final Exam |  |
| $12 / 07 / 10$ | CUMULATIVE FINAL EXAM |  |

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

