

# MATH 105 -- Math For Liberal Arts Students

Ticket #64150 TTh 11:00 a.m.–12:30 p.m. Room BST219

## ◆ Instructor Information

Professor Richard Zucker  
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 Office: Room B267  
 Office Hours: Monday-Friday, 10:00-11:00 a.m.

## ◆ Course Description

"This course examines the nature of mathematics and its role in society, stressing the history of mathematical ideas and methods and the use of mathematics in problem solving and communication. The major categories of mathematics will be studied, with emphasis given to the application of mathematics to various disciplines in the liberal arts. (3 units)"

This course is unlike any math course you have ever taken. We won't be working on improving your algebra skills or memorizing formulas. Instead, you will experience the power, depth, and beauty of this much maligned subject. Prepare to (dare I say) *like* mathematics!

## ◆ Prerequisite

Intermediate Algebra (Math 253), or placement based on the mathematics assessment test.

## ◆ Textbook

Burger & Starbird, The Heart of Mathematics, An invitation to effective thinking, 2<sup>nd</sup> ed. Key College Press, 2005.

## ◆ Calculators

You are expected to bring a scientific calculator to class and use it whenever you need to, tests included.

## ◆ Attendance

Your attendance is required for two reasons. (1) This is not a course you can get entirely from the book. Much of what you will learn will come from lecture. (2) You make an enormous contribution when you are present to participate in discussions, respond to questions and share your own experiences. District policy permits me to drop students who have missed four class meetings (6 hours). While it is my intention to drop students for excessive absences, it is not my responsibility to do so. You should never assume that I have dropped you until you verify the drop on MySite. **Thursday, April 9**, is the absolute drop deadline.

## ◆ Homework

Homework will be assigned frequently. You should complete all assignments with rigor and depth, even though some assignments may not be collected. Clarity

## ◆ Homework, cont'd.

of exposition is important, and you should strive for well-written, polished solutions. You are encouraged to collaborate with others on homework problems, but you must list your collaborators in your solutions. Your combined homework assignments count as 1/8 of your course grade. I do not accept late work, regardless of the reason.

## ◆ Quizzes and Tests

Expect frequent quizzes. I usually give quizzes right at the beginning of class to encourage punctuality. Your combined quiz scores account for 1/8 of your course grade. Missed quizzes cannot be made up, but the lowest quiz will be dropped.

There will be four midterm exams each worth 1/8 of your course grade. The final exam is worth 1/4 of your course grade. There are no make-up tests. However, your final exam score will replace your lowest midterm exam score if it helps you.

## ◆ Calculating Your Course Grade

Your course grade is based on the total points earned on quizzes, homework, four tests and a final exam, as shown at the right.	Quizzes	50pts
	Homework	50pts
	4 tests	200pts
	Final Exam	100pts
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		400pts

Your course grade is based on the sum total of the points you earn, as follows:	A's start at 360 points
	B's start at 320 points
	C's start at 280 points
	D's start at 240 points

## ◆ Blackboard and Email

I will use Blackboard to post quiz and test keys, grades, class photos and other useful resources. Go to the IVC home page ([www.ivc.edu](http://www.ivc.edu)) and click on the Blackboard icon. I will often use email to communicate with you. If you have a personal email address that you frequently use, I encourage you to forward your college email to your personal email address. The instructions to set up email forwarding can be found on my website.

## ◆ Academic Dishonesty

Academic dishonesty as defined by the governing board of the South Orange County Community College District includes, but is not limited to, "...falsification, plagiarism, cheating or fabrication, which compromises the integrity of an assignment, a college record or a program." The complete disciplinary process may be found at <https://www1.socccd.cc.ca.us/docs/edsvcs/ar/BP-5401-StudentConductAR.doc>. In this class, cheating on an exam will result in a zero on the exam, and the zero cannot be replaced by the score on the final exam.

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## Math for Liberal Arts Students

### Tentative Timeline

	TUESDAY 13-Jan	THURSDAY 15-Jan		TUESDAY 17-Mar	THURSDAY 19-Mar
Week 1	Getting Acquainted	The Peg System for memorizing numbers	Week 10	<b>Holiday</b>	<b>Holiday</b>
Week 2	20-Jan Arithmetic Revisted	22-Jan Topics from Chapter 1	Week 11	24-Mar Sections 3.1, 3.2 To infinity...	26-Mar Section 3.3 ...and beyond!
Week 3	27-Jan Problem solving strategies	29-Jan Review for Test 1	Week 12	31-Mar Section 3.4 Power sets	2-Apr More on infinity
Week 4	3-Feb <b>TEST 1</b>	5-Feb Section 2.1 Counting	Week 13	7-Apr Review for Test 3	9-Apr <b>TEST 3</b>
Week 5	10-Feb Section 2.2 Patterns in Nature	12-Feb More on patterns in nature	Week 14	14-Apr Section 4.1 Pythagorean Thm	16-Apr More on the Pythagorean Thm
Week 6	17-Feb Section 2.3 Prime Numbers	19-Feb More on prime numbers	Week 15	21-Apr Section 4.3 Golden Rectangle	23-Apr More on the Golden Rectangle
Week 7	24-Feb Section 2.4 Bar Codes	26-Feb More on bar coding	Week 16	28-Apr Section 4.5 The Platonic Solids	30-Apr Section 5.3 Euler Characteristic
Week 8	3-Mar Section 2.6 Irrational numbers	5-Mar More on irrational numbers	Week 17	5-May Section 7.7 AIDS Testing	7-May Review for Test 4
Week 9	10-Mar Review for Test 2	12-Mar <b>TEST 2</b>	Week 18	12-May <b>TEST 4</b>	14-May No class
			Week 19	19-May No class	21-May <b>Final Exam 10:30 a.m.</b>

**IMPORTANT DATES:**

Drop with refund by	Friday, 1/23/09
Elect CR/NC by	Thursday, 2/19/09
Drop without W by	Thursday, 2/19/09
Drop with W by	Thursday, 4/9/09

**The instructor reserves the right to amend this timeline at anytime.**