# Chatham College Math Literacy Course (Math 100) Fall 2004

#### Instructor

Ashwin Vaidya 412-268-6133

<u>avaidya@andrew.cmu.edu</u> (When sending email, please indicate course number in the "Subject" slot of the email)

www.math.cmu.edu/~avaidya (Please go to the website, under 'Courses', for a link to the course page. You will find a copy of the syllabus through this site and I will also occasionally place materials and useful links here).

#### **Office Hours**

Group 1: Office hours will be held an hour after class.

Group 2: Office hour will be held for an hour prior to the beginning of class.

### **Schedule**

Group 1, T, H 10:00 am – 11: 15 am, BUHL Group 2, H, 6:00pm – 8:30pm, BUHL

#### Text Book

For All Practical Purposes: Mathematical Literacy in Today's World.

# **Course Outline From College Catalog**

This course explores the mathematics from everyday life and problem-solving skills needed to be world-ready. Topics include making sense of statistics, how information is made digital, measurements of growth and form and how to get out of debt.

### **Relationship to College Mission**

This course fulfills the Mathematics proficiency requirement and is designed to improve you mathematical literacy. While not a prerequisite for any other course, it will contribute to making you a world-ready woman.

## **Accommodation for Students with Disabilities**

Chatham college is committed to providing quality education for all students. Those who need special academic accommodations should notify the director of Learning Center as

soon as possible. The Learning Center will work with the student and course instructor to make sure of provision of all the reasonable academic accommodations.

## **Classroom Expectations**

Everyone involved must contribute to a positive learning environment in both lectures and recitations. Please arrive on time, not leave early, keep cell phones turned off during lectures, not converse with fellow students during the lecture and use laptops only for note-taking.

## **Attendance Policy**

Students are expected to attend class regularly and are responsible for missed lecture notes and announcements. If you know you will be missing a class ahead of time, please inform me of your absence and make arrangements with your classmates to obtain notes for the missed lecture.

## **Teaching and Learning Methods**

Since this is a survey type of course and an introductory one, classes will be conducted in a variety of formats. There will be traditional lectures, discussions of previously assigned reading material, audio-visual materials, occasional guest lectures when possible and also student presentations. The students will be asked to occasionally read essays, keep good notes and do the assigned homework on time.

## Grading

The final grade will be based on the following:

Three Tests During the Term: 60 %

Final Exam: 25% Class Project: 15%

## **Makeup Policy**

Makeup exams are discouraged and will be given only upon prior notice to the instructor of absence or in case of emergencies. Grading scheme mentioned above will be strictly adhered to and not changed or adjusted for any student.

#### **Exam Dates**

Dates for the tests are mentioned in the schedule below and will be announced in class well ahead of time. In case of any doubts, please check with you fellow students or the instructor.

## **Grade Assignment**

Grade distribution is according to the following scheme:

90 - 100 : A 87 - 89 : A-84 - 86 : B+ 78 - 83 : B 75 - 77 : B-73 - 74 : C+ 68 - 72 : C 62 - 67 : C-58 - 61 : D Less than 58 : F

# **Class Project**

Students are expected to turn in a typed report at the end of the course on a topic which is relevant to the course. Potential topics will be discussed at the beginning of the course. The report will also be required to be written in a specific format, which will also be discussed in class. Projects may be conducted in groups of no more than 2 to 3 students (per group) depending upon the class size.

# **Schedule for the Course**

Week	Topic
1	Introduction to the course and a broad Introduction to Mathematics, A discussion on the nature of <i>Proofs</i> in mathematics.
2	Understanding the Math of codes (Ch.9)
3	Euclidean Geometry (Ch. 18)
4	Symmetry and Patterns (Ch. 19)
5	<u>Test 1</u> , Audio-Visual Session (Escher)
6	Non-Euclidean Geometry with Applications, Geometry & Art (Ch. 20)
7	Review of Algebra

8	Mathematics of Economics (Ch. 21,22)
9	<u>Test 2</u> , Audio-Visual Session (Movie on Erdos)
10	Basic Statistics (Ch. 5,6)
11	Probability (Ch. 7)
12	Using Excel for analyzing data.
13	Test 3, A Discussion on Pi and Infinity
14	Final Project Submission and Discussion
15	Final Examination

**Note**: This is a tentative schedule. The schedule suggested above will be suitably adjusted in case of lack of time. In case we have more time than is indicated above, I will pick additional topics depending upon the interest of the audience.