Course: **Topics in Algebra, Trigonometry and Pre-Calculus.**
Course code: **NSC556.**
Credits: **1-4.**
Level: **Introductory.**
Location & Time: **Sci216, MWF 9:30-10:20am.**
Instructor: **John Arhin, jarhin@marlboro.edu**
Website:
  - **http://cs.marlboro.edu/courses/TATP/home**   (Unit list)
  - **http://cs.marlboro.edu/courses/fall2009/tatpc/home**   (Fall 2009 Schedule & Fall 2009 unit selection).
Course Text: **None.**

Introduction

This course covers a wide range of math topics prerequisite for further study in mathematics and science and of interest in their own right. The course is divided into over 50 units (listed on the course web page). One credit will be earned for each group of 6 units completed. Students select units to improve their weak areas.

There are also tailored streams for students who wish to go on to study calculus or statistics and for those who wish to prepare for the GRE exam. Over the course of the academic year, around 45 units will be offered in the timetabled sessions. Individual tutorial style arrangements can be made to study the non-timetabled units or to study units earlier than their scheduled session.

Homework

Each unit will occupy one timetabled session. Prior to the session you should have reviewed the material and attempted the exercises. During the session we will talk about the material and work on the problems.

There will be a Q&A session followed by a short quiz in the designated time-slot.

Your answers to the homework sheet should be handed in no later than one week after the session. There will be round-up sessions to consolidate what we have learned up to that point, and round-up homework on these sessions will be distributed (the questions on this homework will have topic indicators; you only have to complete the questions related to topics you have taken).

There is no textbook. Review material is available at the course web page:

http://cs.marlboro.edu/courses/TATP/home

Grades

Grades are calculated as follows:
  - 20% round-up quiz (best two marks from three quizzes);

- 60% homework;
- 20% round-up homework (best two marks from three such homework).

Attendance in selected units, punctuality, class participation and prompt submission of homework are expected. Your performance in these areas will influence your final result by up to one letter grade.

A couple of final comments

You are expected to be aware of the college's policy on academic integrity and to abide by it. It can be found on the college website, and is linked from the course website. Please come and talk to me if anything is unclear.

As a rough guide, taking this course for four credits means that you should be expecting to spend in the region of twelve hours each week (including class time) working on it.

If you have a medical condition or disability that I (as your instructor) should be aware of please contact Megan M. Littlehales in the Health Center, who will in turn contact me.

Fall 2009 Timetable

Month	Day	Unit, quiz, Q&A or round-up
Sept	4	Arithmetic of fractions
	7	Arithmetic of exponents
	9	Simplifying expressions
	11	Q&A session & quizzes
	14	Factoring expressions
	16	Linear equations
	18	Q&A session & quizzes
	21	Word problems: linear equations
	23	Word problems: percentages
	25	Q&A session & quizzes
	28	Geometry: angles and triangles
	30	Geometry: areas and volumes
Oct	2	Q&A session & quizzes
	5	Round-up
	7	Round-up
	9	Systems of linear equations
	12	Linear inequalities
	14	Q&A session & quizzes
	16	To be announced.
	21	Quadratic equations
	23	Word problems: counting and probability
	26	Q&A session & quizzes
	28	Statistical concepts
	30	Primes and divisibility
Nov	2	Q&A session & quizzes
	4	Round-up quiz
	6	Round-up quiz
	9	Polynomial equations I
	11	Q&A session & quizzes
	13	Polynomial fractions
	16	Word problems: polynomial equations
	18	Q&A session & quizzes
	20	Division of polynomials
	23	Polynomial equations II
	25	Q&A session & quizzes
	30	Trigonometry
Dec	2	Applications of trigonometry
	4	Q&A session & quizzes
	7	Round-up
	9	Round-up