I wanted to discuss with you some basic information about taking the Math 1113 Precalculus course here at East Georgia College. This course is NOT a REQUIRED course for most students. You don't HAVE to take this course to be able to transfer to GSU or any other school in the system. Your major MAY require this course but most majors ONLY require Math 1111 College Algebra. I would suggest you talk with your advisor and see if this course is necessary for you. You can take the course if you are simply trying to earn 3 more hours of credit but it is a HIGHER level ADVANCED math course compared to college algebra. Some students STRUGGLE with this class especially if they have never worked with Trigonometry topics in math.

I'm writing this mainly to let students get an early idea of what to expect in taking the course.

It is a course you will have to work very hard in to do well.

If you have any questions please feel free to contact me.

YOU CAN DROP OR ADD CLASSES THE FIRST 3 DAYS OF THE SEMESTER!

Note: I send this email to all students who register for the class. It will probably be sent to you several times (repeated) before classes start. You can just ignore this email if it doesn't apply to you.

Mr. Barrs

## MATH 1113 Pre-Calculus

3-0-3 *Prerequisite: MATH 1101 or MATH 1111* 

Prepares students for calculus, physics, and related technical subjects. Topics include an intensive study of algebraic and trigonometric functions with applications.

### MATH 1121 Introduction to Statistics

3-0-3 Prerequisite: MATH 1101 or MATH 1111

Emphasizes a practical approach to statistics. Topics include descriptive statistics, probability, the binomial and normal distributions, hypothesis testing, estimation, correlation, and regression.

# MATH 1301 Introduction to Computer Programming

2-2-3 Prerequisite: MATH 1101 or MATH 1111

An overview of computers and programming, problem solving and algorithm development; simple data types; arithmetic and logic operators; selection structures; repetition structures; text files; arrays (one-and-two dimensional); procedural abstraction and software design; modular programming (including subprograms or the equivalent).

# MATH 1302 Intermediate Programming

2-2-3 Prerequisite: MATH 1301

Includes an overview of abstract data types (ADT's); arrays (multi-dimensional) and records; sets and strings; binary files; searching and sorting; introductory algorithm analysis (including Big-O); recursion; pointers and linked lists; software engineering concepts; dynamic data structures (stacks, queues, trees).

## MATH 1540 Calculus I

4-0-4 Prerequisite: MATH 1113 or consent of instructor

Topics include a study of limits and continuity, derivatives of algebraic and transcendental functions with applications, the definite integral, the Fundamental Theorem of Calculus, and applications of the integral to areas and volumes.

# MATH 2008 Foundation of Numbers and Operations

3-0-3 Prerequisite: MATH 1001, MATH 1101, MATH 1111 or MATH 1113

Area F introductory mathematics course for early childhood education majors. The emphasis will be on understanding and use of major concepts of number and operations. As a general theme, strategies of problem solving will be used and discussed in the context of various topics.

#### MATH 2012 Calculus II

4-0-4 Prerequisite: MATH 1540

Topics include techniques of integration, further applications of the integral, a study of exponential and logarithmic functions, improper integrals, indeterminate forms, infinite series, and power series.

## MATH 2013 Calculus III

4-0-4 Prerequisite: MATH 2012

Topics include polar coordinates, parametric equations, and multi-variate calculus including partial differentiation, multiple integration, and vectors in two-dimensional and three-dimensional space.

## MSCI 1111 Introduction to Military Science

0-2-1 Co-requisite: MSCI 1510

Introduces cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life shills such as critical thinking, goal setting, time management, physical fitness, and stress management relate to leadership, officer-ship, and the Army profession.