Class Syllabus MTH 164, College Mathematics

Summer 2008, Sam Houston State University Section 03, LDB 212, 12 noon to 2 pm, MoTuWeThFr

Dr. Ken W. Smith

An exciting course!

Mathematics is much more than a toolbox of algorithms. Mathematical concepts occur in a large variety of places in modern life. In this course we will look at a number of modern applications of mathematics, in order to appreciate the broad spectrum of mathematics and its related applications.

Course objectives

Students completing this course will demonstrate an appreciation for the diversity of mathematics in the modern world. We will study set theory and its applications, propositional logic, basic counting techniques, probability and (briefly) the mathematics of finance.

Here are details about the mechanics of this course.

Textbook: *Mathematical Ideas*, 11th edition, 2007, by Miller, et al. (We will cover chapters 2, 3, 11, 12 and parts of chapters 4 and 14.)

Prerequisites: High school math and algebra background equivalent to THEA score of 270.

Contact information

My e-mail address is <u>KenWSmith@shsu.edu</u>. Please feel free to contact me by email. My office is LDB 420A, 936-294-1563.

Office Hours

My formal office hours are: **immediately after class, 2-2:30 in LDB 212.** You may also schedule an appointment with me at other times. (*If you schedule an appointment, please bring to that appointment your textbook and your notebook containing your class notes and worked homework exercises.*)

We will use the Blackboard system. Course notes and review materials, along with important announcements, will be posted on Blackboard. Some announcements will be sent out by email.

Class expectations

Please treat this class as you would other *professional* obligations. If you are unable to attend a class period, I expect you to contact me as soon as possible (by email, preferably) and let me know you will absent. (Usually this means you will notify me *before* you miss class.)

This class meets five days a week. *If you cannot attend every day, you should not be in this course.* (Students who miss more than 3 class days will have their semester grade

lowered by one letter grade; students who miss more than 5 class days will receive a failing grade and their remaining work will not be graded.)

Further guidelines for classroom conduct (including absences on religious holy days) are available at http://www.shsu.edu/syllabus/.

Exercises and Assignments

There will be **daily reading expectations**, along with **daily exercises** to work. The daily exercises are usually *not* collected, but it is assumed that you have worked most of them before the next class. You should bring this work to class. For most students, these readings and exercises require *about* two hours of work between daily sessions.

You should bring the daily homework to class each day, along with your textbook. (Some quizzes will require that you work out of your textbook.)

Quizzes

There will be a short quiz 10-point quiz every hour. These quizzes are designed to focus your study and aid in developing an understanding of the main points of the course. The quizzes are excellent review material for exams.

There will be 34 quizzes; you may consider four of those quizzes to be "extra-credit" or "make-up" quizzes. (As a general rule, there will not be make-ups on missed quizzes. Instead, there are four extra quizzes provided.) Quizzes of students who leave class early or arrive significantly late will not be graded.

Occasionally a quiz will be given overnight, as an exercise. When that occurs, you may use your notes and textbook and you may discuss the quiz with others. (But, as always, material that you turn in should represent *your* work and understanding.)

Since this class meets for only four weeks, I will use a seating chart in order to learn names as rapidly as possible. The seating chart will be set up on the first day, so on the first day of class (Tuesday, June 3) please sit in the seat you intend to use for the remainder of the term.

Exams

There are four regular exams, a mid-term exam and a final exam.

The four regular exams are worth 100 points each and will be on the following dates: Friday, **June 6**, Friday, **June 13**, Monday, **June 23** and Monday, **June 30**. The midterm exam and the final exam are worth 200 points each. They are two hours long and given on Tuesday, **June 24** and Tuesday, **July 1**.

Grades

All points are equal. Quizzes are worth 10 points; regular exams are worth 100 points; the midterm and final exams are worth 300 points. With four exams, two midterms and more than 30 quizzes, it is possible to score more than 1100 totals points throughout the

semester. A semester score of 990 points (90% of 1100) is an A; 880-989 points (80-90%) is a B, 770-879 is a C; and 700-769 is a D. A point total less than 700 points is a failing grade.

Attendance

Attendance at very class session is expected. Students should arrive on time and remain throughout the session. Students who miss *more* than six class hours (3 full days) will have their letter grade lowered by one full grade (in addition to receiving a zero on the hourly quizzes.) A student who misses *more* than ten class hours (5 full days) will receive an *F* grade in the course and any further quizzes and exams will not be graded. (I reserve the right to make exceptions to this policy in *extreme* cases, for responsible students who experience a long-term documented illness or other serious personal crisis.)

There will be several opportunities to earn some extra-credit (25 points) on an extra-credit project.

Students who have 900 or more points on the last day of class, before the 200 point final, will receive an A grade and be excused from the final exam.

Miscellanea

Calculators are allowed on most homework and quizzes. Many of the concepts in this class do not require a calculator.

The last date to drop the course without a grade of F is **Monday**, **June 30**.

Collaboration & Plagiarism

On assignments, homework, or "take home" quizzes, it is acceptable to receive tutoring from the instructor. You are also *encouraged* to discuss the problems with other students. However, anything you turn in must be in *your* own words, with *your* understanding of the material. To turn in material that is written in someone else's words is *plagiarism*.

Of course, on in-class exams or quizzes, <u>all</u> the work you turn in must be your own, without any aid from anyone else. <u>Giving or receiving aid on in-class quizzes and exams will be considered *plagiarism* ("cheating.") In this class, the penalties for plagiarism will include *at least* a zero grade on the submitted material and *most likely* a failing (F) grade in the course with a referral to a disciplinary committee. (Further details are at http://www.shsu.edu/syllabus/.)</u>

Final comment

Please feel free to talk to me. I want you to enjoy this class and to do well!

Dr. Ken W. Smith (<u>kenwsmith@shsu.edu</u>) May 23, 2008