

Professor: Dr S.P. Glasby

### Course Information

Office:	BU 119 (office hours listed adjacent to door).
URL:	<a href="http://www.cwu.edu/~glasbys/">http://www.cwu.edu/~glasbys/</a>
Lectures:	M-F 12 p.m. BU 144, or 1 p.m., BU 111.
Text:	Cohen, Pre-calculus: a problems-oriented approach, 6th Ed., 2005
Assessment:	Maximum(Test 1,Test 3) (10%), Test 2 (40%); Final exam (50%).
Dates:	Test 1 Thu Apr 6; Test 2 Thu May 4 ; Test 3 Thu May 25;
Safari:	<a href="http://portal.cwu.edu/">http://portal.cwu.edu/</a> for exam time, and final grades
Help:	Univ. Math. Center Hertz 104; Meisner Hall Multipurpose Room.

Math 153 is the first of a series of two courses on precalculus (Math154 is the second). It aims to introduce students to some basic and ubiquitous mathematics such as solving linear and quadratic equations, graphing functions, understanding polynomial, exponential and logarithmic functions etc. Familiarity with content of both mathematics is essential to every scientific discipline, to economics, psychology, business, and for that matter reading newspapers or understanding television programs! Math 153 requires you to know basic algebra, so if you have forgotten it, then review it now!

Precalculus I contributes “basic skills” towards your general education program. It requires you to know basic algebra. If you obtain less than 33 out of 36 on the test <http://www.sci.wsu.edu/math/HS/problems.html>, then you must revise before taking the course! All students should review a list of common mathematical errors at <http://www.cwu.edu/~glasbys/>, follow the **teaching** link.

We shall use the graphical calculator TI83 in class. You may use another calculator but you should be self-sufficient in its operation. I will encourage you to perform mental calculations whenever possible, and use the calculator only when it is really necessary. In order to improve quantitative reasoning, the exams will be without calculators. Students who can not quickly and accurately perform simple calculations will be seriously disadvantaged.

We shall cover Chapters 1–5 of the textbook. I should stress though that the lecture notes, not the textbook, form the body of examinable material. I strongly encourage you to read the relevant parts of the textbook *before* attending lectures, review your lecture notes *after* the lecture, and do all the assigned homework problems! The way to become proficient at most skills, from playing violin to learning mathematics, is to practice. Lack of work is a major reason for poor performance in precalculus. You will learn much more doing the exercises yourself than watching an expert solve them

for you! You should spend on average 10 hours per week of private study in addition to the 5 class hours per week.

If you are unable to attend a lecture, make sure you get a copy of the notes from a classmate. I urge you to form your own study groups: you can learn a lot by explaining solutions to a friend, and by hearing solutions. You will find in the Reserve section of the Library: (1) “The pre-calculus problem solver,” and (2) “Lecture guide and student notes for Contemporary precalculus: a graphing approach.” These have a wealth of worked examples, and can be borrowed for up to 2 hours. The Drop-in Help Lab and the Math/Science Help Center mentioned above is a useful source of help. A list of private mathematics tutors may be obtained from the Mathematics Secretary (BU108). You may also call the Univ. Math Center (509) 963 1834.

After each test I will post adjacent to my office a list of scores and approximate grades, so you can determine your relative position in the class. You should double check the time of the final exam using Safari. The exam will be in our assigned classroom unless otherwise announced.

Students requiring special accommodation, because of a physical or mental disability, should see me in the first week of the course. Also, if you are quite sick or suffer a notable hardship, then please let me know promptly. Claims of lengthy hardship that are disclosed the day before the final exam receive less sympathy. The best way to determine how well you are performing is via your *relative position* in the class – there can be a big difference between students at the top of the C’s and those at the bottom. Although the Registrar will mail you your final grades, you can find out earlier by using Safari.

A brief description of the course content is: real numbers, solving equations algebraically, cartesian coordinates, solving equations graphically, graphing functions, inverse functions, graphing polynomial functions and finding their roots, exponential and logarithmic functions, arithmetic and geometric sequences. To help you to know which sections of the textbook to read before class, look at the list of assigned problems.

The “course outcome” or “student learning objective” is that passing students have a reasonable mastery of these subjects, and can solve problems theoretically, and when relevant, with the aid of a graphical calculator.