

Course Information

Math 5365–01

Second Summer Session 2007

July 13, 2007

Instructor: Prof. Lance D. Drager. Office: Math 236. Office Phone: 742–2580, Ext. 242.. If you let the office phone ring long enough, you'll get me or a voice mail system you can leave a message on. My e-mail address is drager@math.ttu.edu.

Course materials will be posted on my web page, which is <http://www.math.ttu.edu/~drager>.

Office Hours: M–F 1:30–3:00. I am often in my office at other times in the afternoon. You can come by outside of formal office hours; I'll usually have time to talk to you. Please feel free to come by if you need help.

Text: There is no specific text.

Learning Outcomes: Students will develop skills in using the Computer Algebra systems *Maple* and *Mathematica* to solve mathematical problems both symbolically and numerically. The students will learn how to use these programs to do two and three dimensional graphics for mathematical visualization. Students will learn programming techniques in both of these Computer Algebra systems. Selected topics from both graduate and undergraduate mathematics will be used as examples.

Assessment of Learning Outcomes: The assessment of student's mastery of the skills and concepts as specified in the expected learning outcomes will occur, with appropriate course grades assigned, as follows:

1. Three in-class exams.
2. The final exam.
3. Exam Corrections.
4. Computer Worksheets.

The worksheets can be downloaded from my web page. Students will work on the worksheets in groups of two or three. Each group should turn in one hardcopy with all of the names on it. I will discuss the worksheets with the

	Raw (x)	Rescaled (y)	
A	95	96	$y = \frac{100 - 90}{100 - 86}(x - 86) + 90$
	92	94	
	86	90	
B	83	86	$y = \frac{90 - 80}{86 - 78}(x - 78) + 80$
	82	85	
	78	80	
C	75	76	$y = \frac{80 - 70}{78 - 70}(x - 70) + 70$
	73	74	
	72	73	
(cut off at 70)			
D	66	67	$y = \frac{70 - 60}{70 - 55}(x - 55) + 60$
	64	66	
	61	64	
	58	62	
F	55	60	$y = \frac{60}{55}x$
	50	48	
	48	52	
	47	45	
	40	44	

Table 1: Grade rescaling

students and have them rework the parts of the worksheets that are not satisfactory. No specific grade will be given on the worksheets, but all worksheets must be completed to pass the course.

The in-class exams and the final exam will all be equally weighted. I will drop the lowest of these four scores (which could be the score on the final). If you are satisfied with your grades on the three in-class exams, you can skip the final and let that be the dropped exam grade.

The exams will count for 75% of the final grade and the Exam corrections will count for 25%.

Exams will be announced well in advance.

For each exam, I will determine a grade range for the A's, B's, C's, D's and F's. I will then linearly resale the grades in the A range to the interval [90, 100], the grades in the B range will be rescaled to the interval [80, 89], and so forth.

At the end of the course, I will average the grades and assign letter grades with cutoffs 90% for A, 80% for B, 70% for C and 60% for D; I might lower these a little, but not much. Thus, with this system, you can determine your standing at any time.

For example, consider a *hypothetical* exam with the raw scores as in Table 1. The grade ranges might hypothetically be chosen as indicated. The numerical scores would then be rescaled as indicated in the table, using the formulas on the right and then rounding to the nearest point. The grade rescaling function would be as graphed in Figure 1.

A similar curve will be applied to quiz grades, and to the homework average at the end of the course.

Final Exam: The final exam is on Thursday, August 9, from 11:00 a.m. to 1:30 p.m. It will be given in our usual classroom.

Makeups: If you miss an exam you can, at your option, take that as the exam score to be dropped. If you are absent from an exam and convince me that your reason was legitimate, I will give a makeup exam. Late homework will only be accepted with a serious, legitimate excuse.

Formative Assessment: Continuous formative assessment of the progress of the course will occur via ongoing communication between the instructor and the students. To this end, all students are encouraged to ask questions during class and to seek the instructor's help out of class when needed. Other activities in support of student-instructor communication will include: practice exams and quizzes, review of homework, and personal interviews with students doing poorly on work assigned at the beginning of the course.

Class Attendance: I will not count class attendance for the grade, except that poor attendance is not likely to impress me with your diligence. Experience shows that it is important to attend class. I may occasionally pass around a sign-up sheet to check the official role, and just to keep track of what's happening.

Remember, you are responsible for all material covered in class and all announcements made in class. If you have to miss a class, you should check with me or a classmate to see what happened.

Identification: You should be prepared to show your Texas Tech picture ID at any quiz or exam.

Accommodations for Disabilities: Any student who, because of a disability, may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make necessary accommodations. Students should present appropriate verification from Disabled Student Services, Dean of Students Office (AccessTECH). No requirement exists that accommodations be made prior to completion of this approved University process.

Religious Holy Days: Which days are "religious holy days" is defined by Texas Law. A student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student excused for a religious holy day may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily. See <http://www.depts.ttu.edu/opmanual/OP34.19.pdf>.

Academic Misconduct: It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own work any work that they have not honestly preformed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension.

For more information, and a description of what is considered to be misconduct, see <http://www.depts.ttu.edu/officalpublications/catalog/AcademicsRegulations.html>

Civility in the Classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class.

For more information, see <http://www.studentaffairs.ttu.edu/vpsa/publications/civility.htm>

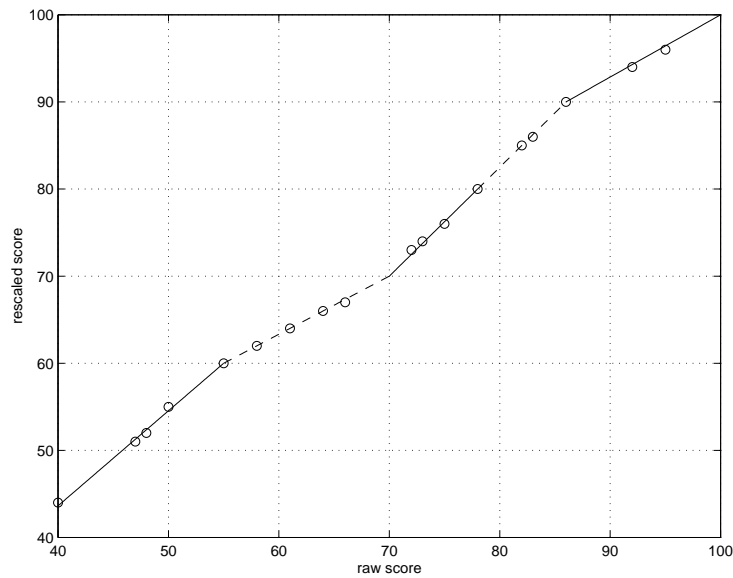


Figure 1: Graph of the grade rescaling function