

# MA 153 Fall 2007

## The Power of One

**Instructor:** John LaMaster

**Web Sites:** John's Home Page: <http://www.ipfw.edu/math/lamaster>  
This section's Home Page: <http://users.ipfw.edu/lamaster/ma153/f07/ma153powerofone.htm>

**Class Meetings:** MWF: 9:00 p.m. – 9:50 p.m. KT 250

**Office:** Kettler 264

**Office Hours:** 30 minutes before class in KT 250  
Thursday: 11:00 a.m. – 11:50 a.m. in KT 264  
MWF 1:00 p.m. - 1:30 p.m. in SB G20.  
Also by appointment or chance.

**Reachable:** 481-5430 (office/voice mail)  
481-6821 (Math Dept)  
481-6880 (FAX)  
email: [lamaster@ipfw.edu](mailto:lamaster@ipfw.edu)

**Prerequisites:** MA 113 with C or higher or placement by departmental exam. This course is primarily intended for students who have completed two years of high school algebra.

**Objectives:** This course serves both as a preparation to the calculus sequences and as a terminal course for students who need only this level of mathematics. With ENG W131 *Principles of Composition*, this learning community includes activities to help students:

1. find and evaluate information for academic and personal use
2. use technology effectively to support learning
3. use writing assignments to encourage reflection on one's learning and reinforce learning
4. connect concepts and applications to family, work, and social lives
5. connect to IPFW resources for academic, social, and personal enrichment

**Content:** College Algebra provides students a college level academic experience that emphasizes the use of algebra and functions in problem solving and modeling, provides a foundation in quantitative literacy, supplies the algebra and other mathematics needed in partner disciplines, and helps meet quantitative needs in, and outside of, academia. Students address problems presented as real world situations by creating and interpreting mathematical models which include linear, exponential, quadratic, power, polynomial and rational functions. Solutions to the problems are formulated, validated, and analyzed using mental, paper and pencil, algebraic, and technology-based techniques as appropriate. Students develop their reading, writing, and questioning skills in an interactive classroom setting. We will cover roughly Chapters 1-5 and 9 of the text.

**Required:** *Functions Modeling Change, 3rd Edition* by Connally, Hughes-Hallett, Gleason, et al.

You will be required to use a graphing calculator for activities and assignments in and out of class. The Graphing Calculators Web Page (<http://www.ipfw.edu/math/resources/calculators.shtml>) can help you obtain and use a grapher. The **TI-83 Plus** or **TI-84 Plus** (or Silver Editions of these) are the *tools of choice*, since these interface with the TI-Navigator System.

**Note:** You can rent a TI-83 Plus for \$10 at Walb Student Union 225 (481-6586).

**Optional:** *Student's Study Guide* by Cannon  
*Graphing Calculator Guide for the TI-83/82* by Carl Swenson

## Important Dates

*Labor Day Holiday: Monday, Sept. 3*

*Test 1 (Tentatively most of Chapters 1 and 2): Friday, Sept 21*

*Fall Break: Monday, Oct. 8- Tuesday, Oct. 9*

*Test 2 (Tentatively most of Chapters 3 and 4): Friday, Oct. 19*

*Last Day to Withdraw Without a Letter Grade: Friday, Oct. 26*

*Thanksgiving Break: Wednesday, Nov. 22 - Friday, Nov. 24*

*Test 3 (Tentatively most of Chapter 5, 8.1, and most of Chapter 9): Friday, Nov. 30*

*Final Exam (Rest of Chapter 9 and Comprehensive): Monday, Dec. 10, 2007 3:30 p.m. – 5:30 p.m*

**Attendance/ Participation/Reading Quizzes:** Since much of the learning in this course occurs interactively during class time, attendance is vital and is part of the course grade (roughly 6.25%). You cannot earn your attendance credit if you are not here for the **entire** class meeting, which means that you are in your seat at 9:00 (and logged in to TI Navigator\*, when used) and staying until class ends at 9:50. You are expected to not only attend all class meetings, but participate in your group and contribute to the learning environment of the class as a whole. If you are blatantly not participating in class (such as doing homework for other classes, reading the newspaper), you may be physically here, but this is *worse* than being absent, since it lowers the class morale. To earn complete points for attendance on a particular day, you will be required to do more than just “show up.” For example, you may be asked to answer some questions correctly about the assigned reading due that day or submit work from class activities to earn your participation credit. If you miss a class, use the Web Site to check what you missed so you come prepared to class.

\*Don't log in as someone else. I can tell when it happens. The consequence is that you are dropped from the class system that day.

Your group sinks or swims together. It is important that all members of the group participate and learn the material. If all members of your team score 90% or above on a chapter test, each will receive 5 bonus points.

**Co-Curricular Activities and Reflections:** See the details in the attached handout.

**Internet Access:** Part of your semester fees went toward giving you Internet access. Make sure your account is activated by next week. Call the Help Desk at 481-6030 if you have questions or need assistance.

**Assignments:** Homework problems from the text will be regularly assigned, but not collected each day. These problems are to be prepared for discussion during the next class period. Completion of the assignments is essential for understanding the material. Assignments will be posted on John's Web Site at so if you miss a class, you can come prepared the next day. However, to be safe, get the phone number of someone else in the class and just call them to see what you missed! **Assignments that will be graded include:**

- **Internet assignments** completed over the Internet on John's Web Site.
- **Writing assignments** that will be completed by hand and collected throughout the course.

**Quizzes:** Occasional section quizzes worth 25 pts. will be given, usually announced a day in advance. You can drop all but the top four quizzes. For this reason, there will be no make-up quizzes **for any reason**. Don't ask. The answer is no.

**Exams:** There will be three chapter exams, worth 100 points each. The final exam is comprehensive. Mark your calendars now: **Monday, Dec. 10, 2007 3:30 p.m. – 5:30 p.m.** Unexcused absences from exams shall result in a score of zero. If an absence is unavoidable and deemed legitimate, you must contact me within 24 hours of the exam (if possible, in advance) in order to schedule a make-up. Each student is allowed one make-up exam.

## Grading:

Attendance/Participation/Reading Quizzes.....	50 pts.
Internet (e-HW) Assignments.....	100 pts.
Writing Assignments.....	25 pts.
Co-Curricular Reflections.....	25 pts.
Quizzes (your highest 4 scores at 25 pts. each).....	100 pts.
Tests (3 Chapter tests at 100 points each) .....	300 pts.
<u>Comprehensive Final Exam.....</u>	<u>200 pts.</u>
<b>Total Points Possible.....</b>	<b>800 pts.</b>

90% -100% (720 pts. or more)	A
80% - 89% (640 to 719 pts.)	B
70% -79% (560 to 639 pts.)	C
60% - 69% (480 to 559 pts.)	D
<60% (Below 480 pts.)	F

If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of Services for Students with Disabilities (SSD). They are located at Walb Student Union, Room 113, telephone 481-6658, as soon as possible to work out the details. Once the Director has provided you with a letter attesting to your needs for modification, bring the letter to me. For more information, please visit <http://www.ipfw.edu/ssd/>, the Web Site for SSD.