

# Math 153: Pre-Calculus I

Meeting Daily at 12 – 12:50 PM in Hertz 122 (fall 2015)

Instructor: Tim Brown

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Office: Bouillon 117

Office Hours: 9 - 10 AM Daily (and by appt.)

See Canvas through mycwu for info, resources, etc.

**Description:** Math 153 is a 5-credit course designed to develop both the concepts and the procedural skills in advanced algebra that will prepare you for the study of Calculus. There will be problem solving, analysis, and communication required in addition to algebraic, graphical, and numerical approaches to the patterns we study. You need to already have a proficiency in a range of math skills, including linear and quadratic functions, which will be built upon during the course. When you finish, you will have proficiency with functions in general, including operations, compositions, and graphs. You also will have mastery of the specific features and applications of linear, quadratic, exponential, logarithmic, polynomial, and rational functions.

**Time:** The general rule of thumb for college is 2 hours outside of class for each hour in class. Expect to spend 10 hours per week besides class time to be successful (some may need more, some less....) You choose to succeed or not largely by how you choose to spend time and energy. Plan ahead and make sure you have time available.

## **Expectations:**

**Uni-tasking!** The (lost) art of doing one thing at a time, focusing, and doing it well. Turn off your phones, ipods, ipads, cortical implants, etc. during class... She will still love you in 50 minutes. The candy will still need to be crushed. Some people will still call him Maurice. Your friends will still have “words” with you ☺. If you are here, be truly here.

Attendance, participation, homework. You have to show up, do your work, ask meaningful questions, and get help as needed to succeed. If you must be gone, you are responsible to access my website for information, and keep up with the work.

Respect yourself: Believe your education is important enough to put forth the effort. Your future is worth investing in.

Respect others (real or simulated respect) – me, classmates, the school, etc. Honesty is an absolutely essential part of that.

## **Materials:**

- A graphing calculator is required. Smart phone apps will not do, as you can't use a phone during quizzes and tests (for what I hope are obvious reasons). A TI-83 Plus or TI-84 plus is recommended, as I can help with those, but other calculators are acceptable if you read your own manual.
- Text: Pre Calculus by Sullivan, bundled with a “My Math Lab” license. You will be doing homework online, so make plans for using student computer labs or arrange other online access. The physical text is only for reference this quarter, but may be required for Math 154 if you go on.

## **Grading:**

- |       |                     |                |
|-------|---------------------|----------------|
| ○ 20% | Final Exam          | 90% - 100% = A |
| ○ 20% | Unit Tests          | 80% - 90% = B  |
| ○ 35% | Quizzes             | 70% - 80% = C  |
| ○ 10% | “Perfect Practices” | 60% - 70% = D  |
| ○ 15% | Homework            |                |

+ and – grades apply if your score is within 2%.

Homework is assigned almost every day, and needs to be done that day. Attendance and participation are essential, and practicing the skills and concepts promptly is the only way to be confident of success. This will be done mostly through [mymathlab.com](http://mymathlab.com). The website gives you immediate feedback, multiple opportunities to get credit for and/or redo a problem, and many tutorial aids and study helps. There will also be paper assignments, with specified due dates.

Perfect Practices are short tasks, usually one to three questions, done during the last 10 -20 minutes of class. They must be completely perfect to get credit (at which point they get stamped), or you keep working until they are. This ensures you are on the right track before you do the homework practice, and also provides an example you have worked out correctly for reference. If you get behind, these must be stamped by the day before the unit test at the latest, will be turned in as a packet on the day of the test.

Quizzes will cover the homework concepts from the previous few days. You can make up or retake up to 4 quizzes for full credit this quarter. You must have relevant perfect practice(s) stamped to be eligible for a retake, and you must come see me outside of class – during office hours or by other arrangement. Retakes must be done by the day before the unit test. If you are absent the day a quiz is given, the retake/make up is your only chance at the quiz.

Chapter tests and the final exam must be taken on the days assigned; you will know at least a week ahead. Other times will be arranged only for the direst of circumstances (family funeral is valid if it is your own ☺).

**Late work:** Each mymathlab assignment is to be done on the day it is assigned, but will have a 1 day grace period built in, so you can ask questions in class and return to the problem set. Any work after that gets 50% credit. Paper assignments have no grace period or late credit. Perfect practices are done the day assigned, but have a grace period until the day before the next chapter test. After that, they get zero credit.

**Cheating** = Failure. You are allowed help always on homework, and usually on perfect practices. (“Help” and “copying” are two different things!!) Tests, quizzes, and the final exam are individual efforts. You will receive a zero with no chance for make up if you copy, help, hint, check, “access extra resources” etc.

Absences will harm your grade in a number of ways

1. You won't get the best opportunity to learn new concepts & skills, or new applications
2. You will miss quizzes – make-ups count against your 4 make up/retake opportunities.
3. You will miss getting your perfect practices checked in a timely manner – and be unsure what the expectations are in terms of showing work, etc.
4. *Occasionally* there is extra credit available only to those who make it to class.

**Extra Help:** Do not hesitate to come see me at my office. Frustrations often relate to prior skills you may not realize you are missing. I can help identify and correct those issues. My office hours are listed on the front of this page, and I'm available other times by arrangement. We have math education students who are available for individual or small group tutoring – see me. Also, the University Math Center, located in ARC on the first floor of Brooks library has very generous drop in tutoring hours, and there are “PALS” course-specific weekly study sessions available with a tutor at times TBA. Kahn academy has an organized collection of over 2,400 tutorial videos, with special emphasis on math. ([www.khanacademy.org](http://www.khanacademy.org))

**Accommodations:** If you have a disability and require accommodations for this course please speak with me privately as soon as possible so that your needs may be appropriately met. If you have not already done so, you will need to register with Disability Services (DS). DS is located in Bouillon 140. Call (509) 963-2149 or email [cds@cwu.edu](mailto:cds@cwu.edu) for more information.

**THE END:** Your final exam will be held on Thursday, December 10 at 12 – 2:00 PM. There will be regular daily work, review assignments, and quiz(es?) due during the last week of class.