Math 141 (PreCalculus I), Item 6428, Fall 2016

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Note: email will not be responded to over weekend.

Office Hours:

Monday	10:00–11:00 *am* & 1:30–2:30 *pm*
Tuesday	10:00–11:00 *am*
Wednesday	10:00–11:00 *am*
Thursday	10:00–11:00 *am* & 1:30–2:30 *pm*
Friday	10:00–11:00 *am*
Or by appointment	

Textbook: *PreCalculus: Mathematics for Calculus,* 7th edition, by James Stewart, Lothar Redlin, & Saleem Watson Thompson-Brooks/Cole. This class **will not use** enhanced web assign (ewa). All lectures and homework problems will be from the 7th edition. If you purchase the e-book the class key that you will need can be found on my website.

Prerequisite: Math 98 with a 2.0 **or** above **or** MMT Algebra STEM 35 and a strong intermediate algebra background. This background includes:

- Factoring techniques.
- Simplifying a variety of algebraic expressions including polynomial, rational, and radical expressions.
- Solving a variety of algebraic equations using the above skills.
- Familiarity with basic graphing calculator syntax including order of operations, window viewing, graphing, and the table feature.
- Graphing and constructing linear and quadratic functions.

Course Description: This **course is designed to prepare students for our calculus series** (and will be taught this way) **and thus is a more challenging first college level course**. Material covered includes, but not limited to, piecewise, polynomial, rational, exponential, and logarithmic functions. Also discussed are behaviors of different types of functions as well as applications.

Factors for Success:

Success in this course and college is dependent upon the student owning, understanding, and following the four attributes listed below (attributes are from the *Transition Mathematics Project-College Readiness standards*):

1. Student needs to demonstrate intellectual engagement
2. Student takes responsibility for own learning
3. Student perseveres when faced with time-consuming tasks
4. Student pays attention to detail

This course requires a lot of practice because it is based heavily on patterns and formulas. With that said, former students have told me that making note cards and studying on a daily basis was crucial for success.

Student Learning Outcomes (SLO): After completing this course you should be able to:

1. Recognize, describe, and analyze key features (domain, range, intercepts, holes, asymptotes) of important function families-polynomial, rational, piece-wise, exponential, and logarithmic functions.

2. Given the graphical or algebraic representation of a function a student will be able to state and sketch a transformation of the function and determine the domain and range of the transformed function.

3. Apply appropriate algebraic methods to find domain, intercepts, and asymptotes (where applicable) to a variety of functions including polynomial, rational, exponential, and logarithmic functions.

4. Identify and produce composite and inverse functions as well as graph a function and its inverse.

5. Identify key features of circles and sketch their graphs from equations in general and standard form.

6. Apply mathematical operations to solve polynomial, rational, exponential, and logarithmic equations.

7. Solve real world problems using techniques discussed in this course.

8. Communicate, summarize, and interpret mathematical ideas in written and verbal form.

9. Effectively use graphing calculators to describe and graph circles and a variety of functions including rational, polynomial, exponential, and logarithmic functions.

Grading:

Exams are 100 points each for a *total of 300 points.*
Homework Sets are 10 points each for a *total of 100 points.*
Comprehensive Final Exam is *worth 200 points*
Extra Credit maximum of 10 points
Total Points: 600

Grades will be assigned on a decimal grading scale. The scale is based upon your earned percentage of the total possible points.

96-100%	4.0	81%	2.8	67%	1.4
94-95	3.9	80	2.7	66	1.3
92-93	3.8	79	2.6	65	1.2
90-91	3.7	78	2.5	63-64	1.1
89	3.6	77	2.4	58-62	1.0
88	3.5	76	2.3	56-58	0.9
87	3.4	75	2.2	55-57	0.8
86	3.3	74	2.1	Below 55	0.0
85	3.2	71-73	2.0		
84	3.1	70	1.8		
83	3.0	69	1.7		
82	2.9	68	1.6		

Attendance:

If you miss 3 class meetings (No Exceptions) during the first week you will be dropped from the course. Please attend class on time; your fellow classmates would appreciate it. It is your responsibility to make sure you are officially enrolled in the course. If you wish to drop the course the deadline to do that **without** receiving a 'W' is Monday October 17th. The last day to withdraw from the course is Friday November 18th. Attending class is imperative to your success in this course. If you do miss class ***you are responsible for the missed material***. I encourage you to find a study partner so you have a contact if you do miss class.

Homework:

Homework will be assigned weekly and collected once a week. Homework will be due every Tuesday beginning with your first homework set that will be due Tuesday October 4th. All assignments must be turned in **at the beginning** of class (if not, it is considered late and will not be graded). Each assignment will be worth 10 points and random problems will be graded from each assignment.

Your weekly homework set can be found on my website http://people.highline.edu/jramirez/. I will only grade problems from the required list the others are only suggested. **No Late Homework Will Be Accepted.** Homework questions will not be addressed in class; you can get your questions answered in office hours. I encourage you to come to the office if you have homework questions as well as visiting the math resource center which is located in building 26 on the 3rd floor which offers free math tutoring for all highline students. It is also encouraged that you setup regular study groups and attend any AEW's through MESA that are offered. Homework solutions will be posted weekly on my webpage.

Homework must be neat, and follow the requirements below:

1. All work must be done in **pencil**.
2. Write only on the **front side** of the paper. (Do not write on the back)
3. Homework must be **STAPLED (prior to coming to class)**
4. Show ALL your work in a concise and logical format, you are now mathematically mature enough to do so.

Exams:

There will be **4 exams** (this includes the final) all of which will be closed book, closed notes and comprehensive. Part of your exams will be no calculator. Exams are based on homework, self-assessments, and lecture material. All of your exams, with the exception of the final, will be 50 minutes in length. There are **no make-up exams**, unless something occurs that is out of your control and it will be addressed on an individual basis. **The final exam is on Tuesday December 13th from 8-9:50 am. Please take this into account when making plans for winter break because the final will not be administered prior to this date. You were aware of this when you registered for the course.**

Self-Assessments:

These are not to be turned in. These will be posted each Friday on my webpage. The purpose of the self-assessments is to make sure you have mastered the weekly outcomes. The self-assessments cover both concept and skill and typically range from 5 to 8 problems. You are encouraged to do these only after you have completed the homework and in a timed testing environment.

Emergency Preparation Plan:

An evacuation plan is posted in each classroom. Please take a few moments to review the material and be familiar with campus emergency plans.

Access Services:

If you have any special needs or concerns about this class, please talk to me personally in my office. If you need course adaptations or accommodations because of a disability; if you have emergency medical information to share with me; or if you need special arrangements in case the building must be evacuated, please provide me with the Letter of Accommodation you have received from the Office of Access Services. **Access Services is located in Building 99.**

Course Etiquette:

In this course every second is valuable. Therefore students need to be on time, prepared, attentive, and attend the entire class. Furthermore, distractions need to be limited so turn off (or switch to vibrate) all electronic devices and please do not listen to music in class; remember you are not required to come to class. If you expect an important call, please tell me before class. ***DO NOT answer a phone call or text in the classroom. If this becomes a problem, the offending individuals' grades will be lowered.***

Calculator and the process of renting one:

A graphing calculator is required preferred models are the TI-83/83 plus or TI-84/84 plus. ***Calculators that have a CAS feature will not be allowed on exams.*** All graphing calculators will be reset the day of an exam. If you have not worked with a graphing calculator and are looking for some more explanation you can come by the office or visit the Math Resource Center (building 26) and view videos that will assist you with your calculator. Other venues for calculator instruction are youtube or teachertube. Smartphone and cell phone calculators are not permitted on exams. You can rent a calculator from the department see procedure below:

Questions: Answers:

A.) How much does a rental graphing calculator cost?

a. **About $25.25 per quarter**

B.) What is the procedure for renting a calculator?

a. **Pay the rental fee at the cashier's office (Building 6).**
b. **Bring the receipt to circulation at the library (25-2)**
c. **Make sure to bring the physical school ID card for checkout.**

Study Habits:

Believe me when I tell you that **study groups are important** for this class. This course is traditionally a stumbling block for most and is a crucial component for future calculus courses and differential equations. You must read the text, and it is strongly suggested that you work in groups. Moreover, I have lots of office hours and I am in my office most other hours of the day as well, so feel free to come by. You can also study in the **Math Resource Center or the MESA Center both are in Building 26-319**.

Cheating:

Cheating of any kind will result in failure of the class and possible disciplinary action from the institution. It is both your right and responsibility to be familiar with the document entitled: Highline Community College Student Rights and Responsibilities code (WAC 1321-1210) adopted by the Board of Trustees of Community College District 9 on January 21, 2008. This is available in the counseling center in building 6.

Weather Issues:

Highline's official channel of communication with students is your Highline Student Email account. For more information, see the Highline Student Email web page at http://helpdesk.highline.edu/studentemail.php. On that web page, there are also instructions for how to forward your student email to a non-Highline email address. I mention this because if the campus closes due to snow, wind, flooding, etc., I will email all of you with updates on the course, homework, exams, etc. The email addresses I will be using are the ones that appear on my class roster.

Monitor Your Grades

Homework	What you earned	What it's worth.
Set 1		10
Set 2		10
Set 3		10
Set 4		10
Set 5		10
Set 6		10
Set 7		10
Set 8		10
Set 9		10
Set 10		10

Extra Credit	What you earned.	What it's worth
		10

Exams	What you earned.	What it's worth.
Exam 1		100
Exam 2		100
Exam 3		100
Final Exam		200

How do I calculate my grade?

To calculate your current grade in the course add up all of the points you've earned in the class so far and divide that number by the number of points that were available. Multiply by 100 to get your percentage. Look up your percentage under the grading section of the syllabus on page two to get the equivalent grade point.

Course Outline-Math 141, Fall 2016

Use the following schedule as a guideline for pre-class preparation. Instructor can sway from schedule without prior notice. **This is a ROUGH Outline**

Week	Sections	Comments
1	1.8, 2.1	Briefly discuss syllabus
2	2.1, 2.2, 2.3	*Homework Set 1 Due*
3	2.3, 2.4, 2.6	*Homework Set 2 Due* ***No Class October 14th***
4	2.6, 2.7	*Homework Set 3 Due* ***Exam 1***
5	2.7, 2.8, 3.1, 3.2	*Homework Set 4 Due*
6	3.2, 3.3	*Homework Set 5 Due*
7	3.4, 3.5	*Homework Set 6 Due* ***Exam 2*** ***No Class November 11th***
8	3.6, 4.1, 4.2	*Homework Set 7 Due*
9	4.1, 4.2, 4.3	*Homework Set 8 Due* ***No Class November 24th & 25th*** ***Exam 3***
10	4.3, 4.4, 4.5	*Homework Set 9 Due*
11	4.5, 4.6, 4.7, 1.9	*Homework Set 10 Due*
12	1.9 and Final Exam	

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