

**Math 43**

PreCalculus

Winter 2019

Room E33

MTWThF

7:30 am – 8:20 am

OFFICE HOURS: M – F: 8:35 – 9:05 am in E37

MATH BOOT CAMP HOURS: By appointment in E37, usually at 10:05 – 10:20

INSTRUCTOR: Victor Legge

CONTACT INFO: victorlegge@yahoo.com (408) 973 1341

PREREQUISITE: Math 42 or equivalent or placement in this class via test.

TEXTBOOK: Larson, PreCalculus 3<sup>rd</sup> edition

COURSE OUTLINE: This class teaches hyperbolic functions, vectors, lines and planes, polarcoordinates, parametric equations, sequences and series, mathematical induction, the binomial theorem, systems of equations and inequalities.

MATERIALS: You are required to have a basic scientific calculator, graph paper, a 3 ring binder, binder paper, pencils and a ruler for this class. Please note that graphing calculators will not be allowed on tests of any sort.

ATTENDANCE: Classes begin promptly. Attendance will be taken for each class. Attendance is mandatory and you are expected to be on time and to attend all classes unless you are ill or have a real emergency. **YOU ARE ALLOWED TO HAVE 2 UNEXCUSED ABSENCES AFTER WHICH YOU MAY BE DROPPED FROM THE CLASS. PLEASE NOTE THAT 3 UNEXCUSED TARDIES EQUALS ONE UNEXCUSED ABSENCE.** Whether you are dropped or not after exceeding 2 unexcused absences depends on your grade. Students with poor attendance and low grades will be dropped from the class very quickly. If you think your absence or tardy should be excused please tell me, otherwise I shall assume that it is unexcused. If you have 16 total absences (excused or unexcused) and it is before the W drop deadline you will automatically be dropped from the class.

ADDING: The last day I add will be Tuesday January 15<sup>th</sup>. I will start adding the second day. I will keep a waitlist for every day. Students will be moved to the bottom of the waitlist if they are late, do not attend class for any reason (this includes day one) or miss assignments

DROPPING: A student is responsible for dropping him/herself. Please do not assume that I will drop you from the class just because you have stopped attending. By not taking responsibility for dropping or withdrawing yourself, your “no grade” may become a W or an F or your W may become an F. If you have not been attending class for a while and still plan to attend please inform me by email or phone. Otherwise you may be dropped from the class. Students who have not dropped and who do not show up for the final exam will receive an F in the course unless there are extreme extenuating circumstances.

- CLASSROOM ENVIRONMENT:** I like my classes to be lively and energetic. I also like students to participate. Sometimes students think this means they have permission to chat to their neighbors while I am lecturing. You do not have permission to talk to your neighbor during lecture time for ANY reason including talking about mathematics. If you cannot live with this rule then do not be in this class. If you have a question about math during lecture time then either ask it in class right then or write down your question and get it resolved for yourself later. Please note that I rarely go over homework questions in class.  
Also note that I very rarely go past the scheduled ending time for class. Sometimes students like to put away their stuff before I have finished lecturing. Please do not do this. It is very distracting to myself and other students.
- HOMEWORK:** Homework will be NOT be collected. Once a week on Friday there will be a homework quiz. This quiz will consist of several homework questions which were assigned the previous week.  
The lowest two homework quiz scores will not count towards your grade in the class. The homework quizzes are worth 20 points.
- CLASSWORK:** During sessions there will sometimes be classwork. You can consult with other students on the classwork and you can ask me questions as well. Every week on Friday, except when there is a midterm one of the classworks from the prior 2 weeks will be collected and graded. It is worth 10 points. Only the best 6 classworks will count towards your grade.
- MIDTERMS:** There will be two midterms. Each midterm is worth a maximum of 200 points. You may bring into each midterm notes on both sides of a 6in x 4in note card.  
It is very important that you take the midterms. Missing a midterm for any reason will mean that you will score the same on the midterm as you do on the final as a percentage. If you do better on the final than you do on any of the midterms then the percent score for the final will replace the percent score for your lowest midterm. During midterms and the final I will not allow friends to sit close to each other.
- RETAKES AND MAKE-UPS:** There are no retakes or make-ups of midterms, under ANY circumstances, EVER!! If you are ill and miss the final then you must show documentation that you were ill and then you will be issued with an incomplete for the class. The final then has to be made up within one year. Besides illness the only acceptable reason for missing the final is a REAL emergency. By a real emergency I mean an unforeseen event that could not have been avoided. Examples include a funeral being scheduled at the same time as the final. Please note that difficult life circumstances do not constitute an emergency.
- REVIEWS:** If time allows there will be a review for midterms. This will involve test taking tips as well as a mathematics review. Just because a question is being reviewed does not mean it will be on the test. It is possible but highly unlikely that all questions reviewed on the review will not be on the test.

**FINAL EXAM:** There will be a comprehensive final given on the last day of instruction. You cannot take the final early under ANY circumstances. Do not ask. The final is worth a maximum of 400 points. **YOU MUST ATTEND THE FINAL.** If you know that you cannot attend the final due to a prior commitment then you should not take this class. Missing the final without a valid reason (see the last section – Retakes and Make-ups) will result in an F in the class. You may bring into the final notes on both sides of two 6in x 4in note cards or one side of an 8.5 inch by 11 inch sheet of binder paper. The final will be given on the last day of instruction, Monday March 25<sup>th</sup>, 7:00 am – 9:00 am. It is imperative that you be on time for the finals.

**COURSE GRADE:** There will be 11 homework quizzes, many classworks, three midterms, and a comprehensive Final Exam.

Points are assigned as follows:

Best 6 homework quizzes	120 pts
Best Classworks	150 pts approx
Two Midterms	400 pts
Final Exam	400 pts
Total points – maximum	1070 pts approx

Letter grades are assigned as follows:

90.0% and over	A
88.0% to 89.9%	A-
86.0% to 87.9%	B+
82.0% to 85.9%	B
80.0% to 81.9%	B-
78.0% to 79.9%	C+
70.0% to 77.9%	C
68.0% to 69.9%	D+
55.0% to 67.9%	D
0% to 54.9%	F

**ASKING FOR HELP DURING TESTS:**

It is my policy not to give you help during a test of any kind. A test is designed to discover what you know without help. Giving one student individual help during a test would be unfair to other students. The only 2 valid questions to ask the instructor during a test is “This question seems unclear to me. Could you please check it?” and “This question seems to be impossible. Could you please check it?” Students for whom English is not their primary language should know that I will not help in any way on tests to explain what words, sentences or any piece of text means. Please note that all students can bring a non-electronic dictionary to a test. If a student has a question during a test my response will be either “I am sorry but I cannot help you,” OR “the question is clear,” OR in the case that there is something wrong with the test I will write on the board what needs to be changed on the test.

**ACADEMIC**

**DISHONESTY:**

Looking at someone else’s test, helping another student during a test, talking to anyone except the lecturer during a test or using an external source of information for which you were not explicitly given permission may result in you being reported to the college. Students who cheat and are reported can be removed from the college. Sharing materials, such as pencils, erasers, calculators etc. during a test is **NEVER ALLOWED** and may be considered as academic dishonesty.

**DISABLED STUDENTS:** Students who are disabled and qualify for special help by law should take advantage of what is entitled to them. Please see me or tell me EARLY in the class if you are one of these students so that I can do everything in my power to give you the assistance you deserve. In getting your initial accommodations for your disability please think carefully about what you need.

**MATH BOOT CAMP:** One of my responsibilities as a teacher is to inform you if I think you have a very good chance of not passing. When students get in this position then for 6 out of 10 students coming to math boot camp will get you through the class. In Math Boot Camp we learn study skills. Not coming to math boot camp will, for 19 out of 20 students result in failure. This is not an opinion. This is based on my experience.

**COURSE GRADES:** Grades for the course can only be changed in the event of a clerical error. It is not legal for me to change the grade for any other reason. If you require your grade quickly after the final please send me an email within 3 days of the final and I will give you your grade on the final within 5 days of the final. If you send me an email more than 3 days after the final I will get you your grade within 48 hours.

**TEACHER ABSENCE:** Please note that if and when I am absent the general policy is not to provide a substitute teacher to cover for the class unless the absence is over one day. Usually, but this does not always happen, a note is posted on the door of the room informing students that class is cancelled for that day. In the event of this happening it is the student's responsibility to study the material that was scheduled for that day. It is also recommended that you study the material for next week's class as well, in advance. This is because when I return from the absence I will cover the material that was missed and the current material in one week. In other words I will be going quicker!!!  
If I am absent for an extended period of time a substitute will be provided. Please check your email just before coming to class. If I am going to be absent an email will be sent to you.

**CONTRACT:** One purpose of this greensheet is to provide you with the guiding principles of the class and another is to make sure that you have answers to any questions that might arise. Please put this sheet in a safe place where you can easily refer to it. Make sure you read all of it before you ask me any questions about the course. It is also a contract between you, the student, and myself, the instructor of record. Make sure you understand its contents fully especially the parts that pertain to testing and the computation of your grade because so long as you remain enrolled in the course you are, like everyone else, implicitly agreeing to abide by these terms.

## SCHEDULE FOR MATH 43

### KEY:

\* INDICATES THAT A QUIZ OR TEST IS SCHEDULED FOR THIS DAY.

\*\* MEANS ADD, DROP OR WITHDRAW DEADLINES

DAY	CLASSWORK	HOMEWORK
-----	-----------	----------

#### Week 1 of class

1.(1/7)	Green Sheet,	
2.	7.1, 7.2	<b>7.1</b> (12, 18, 24, 32, 42, 48, 52, 74)
3.	7.2, 7.3	<b>7.2</b> (26, 30, 34, 42, 44, 50)
4.	7.3	<b>7.3</b> (12, 18, 21, 26, 33, 36, 42, 47, 60, 65, 76)
5.	7.5	

#### Week 2 of class

6.(1/14)	7.5	<b>7.5</b> (8, 10, 16, 18, 29, 34, 38, 43, 48, 53, 62, 69, 76, 82)
7.	8.1	
8.	8.1 <b>Hwk 1 due: 7.1 – 7.4</b>	<b>8.1</b> (12, 14, 18, 24, 32, 37, 40, 48, 57, 60, 67, 76, 89, 94, 102, 105, 107)
9.	8.2	
10.*	8.2, 8.3 <b>Quiz 1 (7.1 – 7.4)</b>	<b>8.2</b> (8, 14, 18, 31, 34, 43, 49, 61, 65)

**\*\*SATURDAY (1/19) LAST DAY TO ADD THE CLASS**

**\*\*SUNDAY (1/20) LAST DAY TO DROP CLASS WITH NO RECORD OF A GRADE AND WITH A FULL REFUND**

### Week 3 of class

11..(1/21)	Martin Luther King, Jrs Birthday	No School
12.	8.3	<b>8.3</b> (8, 12, 19, 24, 38, 44, 51, 54, 58, 74)
13.	8.3, 8.4 <b>Hwk 2 due: 7.5, 8.1</b>	
14.	8.4	<b>8.4</b> (6, 18, 22, 30, 35, 44, 50, 72, 78, 87)
15.*	8.5	<b>Quiz 2 (7.5, 8.1)</b>

### Week 4 of class

16.(1/28)	8.5	<b>8.5</b> (8, 16, 20, 26, 33, 40, 50, 56, 63, 70)
17.	9.1	
18.	9.1, 9.2 <b>Hwk 3 due: 8.2 – 8.4</b>	<b>9.1</b> (10, 14, 17, 26, 30, 35, 44, 50, 56, 65, 70, 73, 82, 91, 96, 104, 108, 112, 117)8.5
19.	9.2	<b>9.2</b> (8, 13, 20, 29, 36, 43, 50, 53, 58, 64, 72, 77, 94, 102)
20.*	9.3	

**\*\*FRIDAY (2/1) – LAST DAY TO REQUEST P/NP GRADE**

### Week 5 of class

21.(2/4)	9.3 <b>Quiz 3 (8.2 – 8.4)</b>	<b>9.3</b> (12, 21, 30, 39, 42, 46, 56, 59, 68, 78, 84, 91, 98, 102, 115)
22.	9.4	
23.	9.4 <b>Hwk 4 due: 8.5, 9.1 – 9.3</b>	<b>9.4</b> (6, 9, 14, 21, 24, 26, 31, 42, 48, 58, 63, 68, 75) 115)
24.	9.5	
25.*	<b>MIDTERM I</b> <b>(Chapters 7 and 8, NOT 7.6)</b>	

**Week 6 of class**

- 26.(2/11) 9.5, **9.5** (6, 12, 17, 24, 35, 42, 49, 56, 64, 69, 76, 81, 86)
27. **10.1** (2, 5, 10, 17, 22, 31, 36, 44, 50, 57, 60, 66, 69)
28. **10.2** (2, 4, 8, 13, 18, 21, 28, 33, 40, 46, 58, 62, 68, 71, 76, 81)  
**Hwk 5 due: 9.4**
- 29.\* **Quiz 4 (9.1 – 9.3)**
30. **Abraham Lincoln's Birthday** **No School**

**Week 7 of class**

31. (2/18) **George Washington's Birthday** **No School**
32. **10.3** (7, 12, 17, 22, 28, 33, 40, 47, 52, 62, 63, 66)
33. **Hwk 6 due: 9.5, 10.1, 10.2**
34. **10.4** (6, 16, 21, 30, 37, 46, 50, 54, 58, 63, 68)
- 35.\* 10.6  
**Quiz 5 (9.4, 9.5, 10.1)**

**Week 8 of class**

36. (2/25) 10.6, 10.7 **10.6** (6, 8, 17, 24, 28, 32, 36, 40, 47, 60, 65)
37. 10.7 **10.7** (8, 15, 24, 38, 45, 47, 54, 66, 72, 77, 82, 91, 104, 110, 115)
38. 10.8 **10.8** (4, 8, 14, 21, 26, 35, 40, 46, 70, 73, 78)  
**Hwk 7 due: 10.3, 10.4**
39. 10.9
- 40.\* 10.9  
**Quiz 6 (10.2 – 10.4)**

**\*\*FRIDAY (3/1) LAST DAY TO DROP WITH A W GRADE**

### Week 9 of class

- 41.(3/4) 10.9 **10.9** (2, 7, 12, 15, 20, 27, 40, 43, 47, 50, 60, 65)
42. 6.3
43. 6.3, 6.4  
**Hwk 8 due: 10.6 – 10.8** **6.3** (12, 15, 20, 27, 32, 39, 44, 51, 56, 61, 66, 71, 76, 83, 77, 93, 102)
44. 6.4 **6.4** (7, 12, 19, 24, 29, 34, 41, 48, 55, 60, 65, 70, 73, 78)
- 45.\* 11.1  
**Quiz 7 (10.6 – 10.8)** **11.1** (2, 10, 12, 20, 21, 24, 29, 36, 40, 44, 51, 58, 67, 74, 77)

### Week 10 of class

- 46.(3/11) 11.2
47. 11.2 **11.2** (6, 13, 18, 25, 30, 31, 38, 41, 50, 54, 60)
48. 11.3  
**Hwk 9 due: 10.9, 6.3, 6.4, 11.1**
49. 11.3 **11.3** (6, 12, 20, 24, 30, 33, 42, 46, 49, 54, 56, 59)
- 50.\* **MIDTERM II (chapters 9 and 10)**  
**Hwk 9 due: 10.9, 11.1**

### Week 11 of class

- 51.(3/18) 11.4
52. 11.4
53. 11.4 **11.4** (6, 10, 15, 20, 25, 30, 35, 38, 41, 48, 51, 58, 62)  
**Hwk 10 due: 11.2, 11.3**
54. Review for Final
- 55.\* Review for Final  
**Quiz 8 (6.3, 6.4, 11.1, 11.2, 11.3)**

### Week 12 of class

- 56.(3/25) **FINAL (All sections covered above but there will be more questions on chapter 11 than on each of the other chapters) –7:00 am to 9:00 am.**  
**Hwk 11 due: 11.3, 11.4**



**Student Learning Outcome(s):**

\*Analyze, investigate, and evaluate linear systems, vectors, and matrices related to two or three dimensional geometric objects.

\*Graph and analyze regions/curves represented by inequalities or trigonometric, polar, and parametric equations, including conic sections.

\*Analyze, develop, and evaluate formulas for sequences and series; Justify those formulas by mathematical induction.