MATH 41.07 Pre-calculus I: Theory of Functions Spring 2015

Meets: MTWRF 10:30am – 11:20am. Room: S54

Instructor: Vadim von Brzeski

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Office Hours: Tuesday & Thursday 9AM – 10AM, or by appointment.

Location: TBD

Course description: This course is an in-depth look at polynomial, rational, exponential, and logarithmic

functions. We will investigate the properties and graphs of such functions, and become

adept at solving related equations.

Student Learning Outcome Statements (SLO):

 SLO: Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.

• SLO: Synthesize, model, and communicate real-life applications and phenomena

using algebraic and transcendental functions.

Pre-requisites: Mathematics 114 or equivalent (intermediate algebra). A desire to learn math.

Materials: Book (REQUIRED): Precalculus with Limits, 2nd edition, by Larson, published by

Brooks/Cole, Cengage Learning 2007.

Calculator (recommended): graphing calculator. A TI-84 is recommended (or TI-83+, TI-

83). NOTE: calculators will not be needed nor allowed on exams.

Method of Instruction / Philosophy:

"You don't learn math by reading math; you learn math by **doing** math." – my former professor. Therefore, we will be **doing** a lot of math together. We will reinforce old

concepts and we will practice new concepts.

Homework: There will be 8 homework assignments. Each one will be assigned on a particular Monday

(see Calendar below) and **due on the Friday** of the same week. **LATE HOMEWORK WILL NOT BE ACCEPTED**. Homework will usually consist of more involved problems (e.g. graphing) and/or some *optional* extra credit challenges for folks that are so inclined. Not

all HW problems in each assignment may be graded.

Drills: We will have mini-quizzes or "drills" every other day of lecture (see Calendar). Each drill

will consist of 10 or so practice problems and will take place during **either the FIRST or the LAST 10-15 minutes of the lecture**. The drills are not meant to be tricky or difficult – they are meant to give you practice in solving standard problems and improving algebraic proficiency. There will be no makeup drills if you miss a class or come late or leave early,

although the 3 lowest drill scores will be dropped.

Midterm Exams: There will be 3 exams. The exams will be closed book (no notes). The exam dates are

shown in the Calendar. **NO MAKE-UP EXAMS WILL BE GIVEN**. If you miss one exam, the percentage on the final will replace the score of the missing exam. If a second exam is

missed, it's score will be 0.

Final Exam: Thursday, June 25 at 9:15-11:15 a.m.

Grading
Breakdown:

	Quantity	Points Each	Total Points	%
Drills	22	5	110	16%
Homework	8	10	80	11%
Tests	3	100	300	43%
Final	1	210	210	30%
TOTAL			700	100%

^{*} There are 25 drills on the Calendar. The lowest 3 scores will be dropped.

Grading Scale:

If total points			Then grade:
>=	679	97%	A+
>=	651	93%	Α
>=	630	90%	A-
>=	609	87%	B+
>=	581	83%	В
>=	560	80%	B-
>=	539	77%	C+
>=	490	70%	С
>=	420	60%	D
<	420	60%	F

Expectations of Students:

- 1. Academic dishonesty will not be tolerated. If a student is found cheating on an exam or a homework item, or violating other codes of academic integrity, he or she will receive a 0 score for the item in question. Repeated instances of cheating may lead to failing the course and further action. See the section on Academic Integrity in your current schedule of classes.
- 2. Attendance: A student who stops coming to class and does not drop the class will get the grade that their work earns. It is the student's responsibility to drop the **class.** You are *expected* to attend all classes.
- 3. Showing your work:
 - a. You need to show your work on HW and exams in order to receive full credit; on drills it depends on the particular problem.
 - b. Your work needs to be **legible** if I can't decipher your handwriting, you will lose points. Neatness will also help correctness.
- 4. Class conduct: Any student who is disruptive may be asked to leave class. A student who refuses to leave the room may be dropped from the class and reported for further action. Students are expected to silence and put away **mobile phone, tablets, etc**, and should refrain from eating during class.

Important Registrar LAST DAY TO ADD/DROP: 4/18

Dates:

LAST DAY TO DROP W/ NO GRADE RECORD: 4/19

LAST DAY TO REQUEST PASS/NO-PASS: 5/1 LAST DAY TO DROP WITH A "W": 5/29

Students with Disabilities:

For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see the contacts below:

- Disability Support Services (DSS): Student Services Building (408)864-8753
- Educational Diagnostic Center (EDC): Learning Center West 110; (408)864-8839. Special Education Division: (408)864-8407; deanza.edu/specialed

<u>Calendar</u>

	Monday	Tuesday	Wednesday	Thursday	Friday
April	6 Syllabus Expectations Drill 1	7 A.1/A.2	8 A.3 Drill 2	9 A.4	10 A.5 Drill 3 HW 1 DUE
April	13 A.6	14 A.7 Drill 4	15 Ch 1.1	16 Ch 1.2 Drill 5	17 Ch 1.3 HW 2 DUE
April	20 Ch 1.4 Drill 6	21 Ch 1.5	22 Ch 1.6 Drill 7	23 Ch 1.7	24 Ch 1.8 Drill 8 HW 3 DUE
April / May	27 Ch 1.9	28 Ch 1.10 Drill 9	29 Review Ch 1	30 TEST 1	1 Ch 2.1
May	4 Ch 2.1 Drill 10	5 Ch 2.2	6 Ch 2.2 Drill 11	7 Ch 2.3	8 Ch 2.3 Drill 12 HW 4 DUE
May	11 Ch 2.4	12 Ch 2.4 Drill 13	13 Ch 2.5	14 Ch 2.5 Drill 14	15 Ch 2.6 HW 5 DUE
May	18 Ch 2.6 Drill 15	19 Ch 2.7	20 Ch 2.7 Drill 16	21 Review Ch 2	22 TEST 2
May	25 Memorial Day No Class	26 Ch 3.1 Drill 17	27 Ch 3.1	28 Ch 3.2 Drill 18	29 Ch 3.2 HW 6 DUE
June	1 Ch 3.3 Drill 19	2 Ch 3.3	3 Ch 3.4 Drill 20	4 Ch 3.4	5 Ch 3.5 HW 7 DUE Drill 21
June	8 Ch 3.5	9 Review Ch 3 Drill 22	10 Review Ch 3	11 Review Ch 3 Drill 23	12 TEST 3
June	15 Review Drill 24	16 Review	17 Review Drill 25	18 Review	19 HW 8 DUE
June	22 No Class (instructor out of town)	23	24	25 FINAL EXAM 9:15AM – 11:15AM	26