

SYLLABUS

MATHEMATICS 90 – INTRODUCTORY CALCULUS I BROWN UNIVERSITY – FALL 2009

<u>Section:</u>	<u>Time:</u>	<u>Room:</u>	<u>Instructor:</u>	<u>WebAssign Class Key</u>
So1	MWF 9am	WH 301	Ben Wieland	brown 4988 8783
So2	MWF 12pm	BH 168	Ben Wieland	brown 3959 1146
So3	MWF 1pm	B-H 160	Steffen Marcus	brown 2360 7334
So4	MWF 2pm	BH 159	Noah Giansiracusa	brown 2524 2405
So5	Tu-Th 9am	BH 153	Jeffrey Brock	brown 0676 8170

COORDINATOR:

- ^ Jeffrey Brock – 314 Kassar House

WEB PAGE:

- ^ The course will be operated via the on-line course system at WebAssign.

<http://www.webassign.net>

You will receive information in the first classes about how to self-register with WebAssign for Math 90 in the appropriate section.

REQUIRED TEXT:

- ^ *Calculus and Early Transcendentals, 6e.*, James Stewart. *The on-line edition is acceptable and can be purchased when you self-register at www.webassign.net!*
If you have an older or used edition, you can pay for the WebAssign on-line homework system as a stand-alone option as well.

TOPICS TO BE COVERED:

- ^ The course will be an introduction to Calculus.
 - Special functions, exponential, inverse and logarithm

- limits and continuity
- differentiation, the product, quotient and chain rules, rational functions
- rates of change and applications, maxima and minima
- indeterminate forms and L'Hospital's rule
- introduction to methods of integration and applications, areas, volumes, fundamental theorem of calculus

RECITATIONS:

- ^ The recitation sections will all be held on Tuesdays. The recitation times are as follows (all rooms are TBA).
 - 9:00-10:20am – two sections: Li-Mei Lim and Ian Sprung
 - 4:00-5:20pm – four sections: Jackie Anderson, Linhui Shen, Dimitrios Moirogiannis and Li-Mei Lim
 - 6:30-7:50pm – four sections: Jackie Anderson, Linhui Shen, Dimitrios Moirogiannis and Ian Sprung

These recitations, which will serve to clarify points from the homework, will be run by Teaching Assistants that will likely be tethered to a particular section, as determined by enrollment.

Any homework that is not completed on-line in the WebAssign system will be due in your recitation section, at the beginning of section, and should be turned in to your TA.

- ^ There will be a quiz given in each section, graded and returned to you the following section.

REQUIREMENTS:

- ^ **Lectures:** You are responsible for all material presented in lectures. Feel free to interrupt and ask questions at any time; class participation is highly encouraged. Please respect your peers and the learning process by refraining from coming late to or departing early from lecture.

- ^ **Homework:** There will be weekly homework assignments assigned each Tuesday morning and due the following Tuesday.

On-line portions of the assignments **must be completed** prior to 9:00AM on Tuesday morning. Paper assignments must be completed and turned in at the beginning of your recitation.

You may discuss your (paper) homework in groups of three or fewer; but if so you must attribute your collaborators at the top of each homework, e.g. "I worked on these problems with..."

Late homework will not be accepted.

- ^ **Exams:** There will two midterms and a final exam.

*Midterms will be held at 7:00 pm on the **Wednesdays of October 7 and November 4.** The room will be determined later.*

*The Final Exam will be at the scheduled time for **Exam Group 17,** which will be **2:00 pm on Tuesday, December 15.** Please make your **end-of-semester travel arrangements accordingly.** The room will be determined later.*

COURSE GRADE:

The course is graded S/NC. Your score will be based on homework and exams as follows:

- ^ **Homework/Quizzes** 15%.
- ^ **Midterms** 20% each.
- ^ **Final** 45%.

PREREQUISITES:

- ^ Everyone should be familiar with the following terms and concepts from high school:
 - Real numbers, absolute values, intervals, functions

- Distance between points, straight lines and slopes, equations of straight lines
- Graphs of equations, graphs of functions
- Combinations of functions, polynomials, trigonometric functions

OFFICE HOURS AND ADDITIONAL HELP:

^ Office hours are now being set and will be announced.

^ Appointments are available via email:

Teaching Fellows:

- Jeffrey Brock `Jeff_Brock@brown.edu`
- Ben Wieland `wieland@math.brown.edu`
- Steffen Marcus `Steffen_Marcus@brown.edu`
- Noah Giansiracusa `Noah_Giansiracusa@brown.edu`

^ Teaching Assistants:

- Li-Mei Lim `llim@math.brown.edu`
- Jackie Anderson `jackie@math.brown.edu`
- Ian Sprung `zeta@math.brown.edu`
- Linhui Shen `linhui@math.brown.edu`
- Dimitrios Moirogiannis `dimitris@math.brown.edu`

^ Other resources:

- The Math Resource Center (MRC): The MRC helps students with calculus, including homework problems and concepts from lecture. Drop-in help is available in Kassar House Room 105, Monday through Thursday, 8:00-10:00PM. MRC generally begins operation in the second or third week of classes. For further information, see

<http://www.math.brown.edu/mrc/>