# Math 1156 - Calculus for the Biological Sciences - Autumn 2013

Instructor: Michael Schwemmer, Jennings Hall 379, schwemmer.2@mbi.osu.edu, 614-688-3443 Instructor office hours: M 9:30am - 10:30am, W 12:30pm-1:30pm, F 9:30am-10:30am, or by appointment (please email me in advance). Location: Jennings Hall 379

## Teaching Assistants:

Hao Ying, Math Tower 304, ying@math.ohio-state.edu Shenhui Liu, Math Tower 200, liu.2076@math.osu.edu

TA office hours: contact your TA

Lecture 22367: MWF 11:30am-12:25pm at Jennings Hall 155

### Recitation sections:

22368: TR 11:30AM - 12:25PM, McPherson Chemical Lab 1035, TA: Hao Ying 22369: TR 12:40PM - 1:35PM, McPherson Chemical Lab 1046, TA: Hao Ying

22370: TR 11:30AM - 12:25PM, Boltz Hall 428, TA: Shenhui Liu 22371: TR 12:40PM - 1:35PM, Boltz Hall 124, TA: Shenhui Liu

## Course homepage for announcements, homework, and exam reviews:

I will mainly use Carmen (https://carmen.osu.edu/), but a copy of the course syllabus as well as other course information is available at

http://people.mbi.ohio-state.edu/schwemmer.2/MATH1156.html

**Prerequisite**: A grade of C- or above in 1148 and 1149, or a grade of C- or above in 1150, or credit for 150, or Math Placement Level L. Not open to students with credit for 1151 (151.xx) or above. GE quant reason math and logical any course

Catalog Descriptions: Limits, continuity, derivatives, mean value theorem, extrema, curve sketching, related rates, differentiation of the trig, log, and exponential functions, basic integration techniques

**Purpose of Course**: To provide students with a solid foundation in one-variable differential calculus, to model and analyze phenomena in the Biological Sciences

Follow-up Course: Math 1157

**Textbook:** Calculus for Biology and Medicine, Claudia Neuhauser, Third Edition, Prentice Hall, Chapters 1-7.

**Homework:** There will be 11 assignments in total, but only 10 will be counted towards your final grade as your lowest scored assignment will be dropped. Problems for the assignments will be chosen directly out of the textbook. Homework will be graded on both completeness and correctness. We will choose 3-4 problems to grade for correctness. Homework will be collected during recitation classes. Late homework will not be accepted. The general rules for academic honesty apply to all written work.

Quizzes: There will be 4 quizzes in total. Make-up Quizzes will not be offered except in extraordinary circumstances

Midterm and Final exams: There will be three in-class midterm exams, in Week 4, Week 8 and Week 11; make-up exams will *not* be offered except in extraordinary circumstances. The final exam will be held on Monday December 9th, 12:00pm-1:45pm. Please note these exam time when making any travel arrangements. Taking the final exam is mandatory.

**Team Project:** After the 3rd midterm, the whole class will be split into teams of 5 to 7 students to work on different team projects. The team projects are real research problems designed and led by talented postdocs at the Mathematical Biosciences Institute, Ohio State University. Each team is required to write a team project which is due **Wednesday**, **December 4th**. Each student is required to write part of the team project report. The score a student gets for the team project will be evaluated by the TA based on the quality of the project report of the team AND the student's contribution.

Grading Policy: 1000 points in total

• Homework: 100 total points. 10 points each assignment.

• Quizzes: 100 total points. 25 points each quiz, 4 quizzes total.

• Midterm exams: 375 total points. 125 points each midterm, 3 midterms total.

Team Project: 125 points.Final exam: 300 points.

TAs are responsible to keep copies of detailed grades in paper and update them on Carmen for students to see.

Calculator Policy: see http://www.math.ohio-state.edu/files/calculator.pdf In addition, no graphical calculator.

#### General Policies for All Math Courses at OSU:

see http://www.math.ohio-state.edu/files/addendum.pdf

**Disability Statement**: Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone (614) 292-3307 and VRS (614) 429-1334; webpage http://www.ods.ohiostate.edu.

Academic Misconduct Statement: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term academic misconduct includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee. For additional information, see the Code of Student Conduct: http://studentaffairs.osu.edu/resource csc.asp

#### Additional Information:

The Mathematics and Statistics Learning Center provides free tutoring for Math 1156. Their location and walk-in hours are available on the website: www.mslc.ohio-state.edu.

The instructor reserves rights to make necessary changes for the course any time during the semester. The students are responsible for keeping up with possible changes.