Lecture: MTWTh, 9:30–10:50 AM in Peterson 104.
Recitation Sections/Workshops: MTW, 11:00–11:50 AM in HSS 1315.
Holiday: July 4
E-mail: ashenk@ucsd.edu (Be sure your e-mail address is on the UCSD Blink web page.)
Web sites:
- The course: www.math.ucsd.edu/~ashenk/
- A previous Math 20A class:
  www.math.ucsd.edu/jeggers/Archive/2005Fall/Math20A/index.html
Office hours: MTW 12:00AM – 12:45PM, Th 11:00-11:45, and by appointment in APM 5816
  (858-534-2654)
Teaching Assistant: David Wroblewski (dwroblew@math.ucsd.edu). APM 5760
Text: Class Notes by Shenk. Distributed in class.
Homework: Homework and questions in the Class Notes should be worked in groups of two or three.
Graphing calculators: Scientific and graphing calculators such as the Texas Instruments TI-83 or TI-86 may be used on homework, quizzes, and exams. Calculators like the TI-89 and TI-92, which can perform symbolic algebra and calculus, may be used for homework but not on quizzes or exams.
Midterm and final exams: Midterm exams will be given at 10:00 AM on Thursday, July 13 and Wednesday, August 2. The final exam time will be Saturday August 5 from 3 to 6 PM. UCSD photo ID’s will be required at the examinations.
Grading: Questions: 10%; Homework: 10%; Quizzes: 10%; Midterm 1: 20%; Midterm 2: 20%; Final Exam: 30%. Grades on homework, questions quizzes, and exams will be curved. The final exam grade will replace all midterm scores with lower grade points. A student must pass the exams to pass the course and must earn a C on exams to earn a C in the course.
Web support: The course web page will contain announcements, the syllabus, lecture outlines, homework assignments, and homework, quiz, and examination solutions. It also has graphing calculator instructions and problem tutorials.
Tentative schedule
(All references are to the Class Notes, to be distributed in class)

Week 1

M, 7/3. Lecture: Functions and graphs. Lecture 1 on Sections 0.1 and 0.2.


T, 7/4: Holiday

W, 7/5. Lecture: Limits and Continuity. Lecture 2 on Sections 1.1, 1.2, and 1.3. Detailed responses to the questions in these sections are due at the beginning of class.


Th, 7/6. Lecture: Quiz 1 on Sections 0.1, 0.2, 1.1, 1.2, and 1.3.

Week 2

M, 7/10. Lecture: Linear functions, average rates of change, and the derivative. Lecture 3 on Sections 2.1, 2.2 and 2.3. Detailed responses to the questions in these sections and Homework 1 are due at the beginning of class.


T, 7/11. Lecture: Derivatives of powers and linear combinations. Estimating derivatives. Lecture 4 on Sections 2.4, 2.5. Detailed responses to the questions in these sections are due at the beginning of class.


W, 7/12. Lecture: Derivatives of products, quotients, and powers of functions. Linear approximations. Lecture 5 on Sections 2.6, 2.7, and 2.8. Detailed responses to the questions in these sections are due at the beginning of class.

Th, 7/13. Lecture: Quiz 2 on Chapter 2

Week 3

M, 7/17. Lecture: Sketching graphs of functions. Lecture 6 on Sections 3.1, 3.2, and 3.3. Responses to the questions in these sections and Homework 2 are due at the beginning of class.


T, 7/18. Lecture: Maxima and minima. The Chain Rule. Lecture 7 on Sections 3.4, 3.5, and 4.1. Responses to the questions in these sections are due at the beginning of class.


W, 7/19. Lecture: Derivatives of logarithms and exponential functions. The differential equation \( \frac{dy}{dt} = ry \). Review Sections 0.3, 0.4, 0.5, and 0.6 before class. Lecture 8 on Sections 4.2, 4.3, and 4.4. Detailed responses to the questions in Sections 4.2, 4.3, and 4.4 are due at the beginning of class.

Th, 7/20. Lecture: Homework 3 is due. Exam 1 on Chapters 0 through 4.
Week 4

M, 7/24. Lecture: Derivatives of trigonometric and hyperbolic functions. Lecture 9 on Sections 4.5, 4.6, and 4.7. Detailed responses to the questions in these sections and Homework 3 are due at the beginning of class.


T, 7/25. Lecture: L'Hopital's Rule. Maxima/minima and graphing with transcendental functions. Lecture 10 on Sections 5.1 and 5.2. Detailed responses to the questions in these sections are due at the beginning of class.


W, 7/26. Lecture: More related-rate problems. Implicit differentiation. Newton’s method. Lecture 11 on Sections 5.3, 5.4, and 5.5. Detailed responses to the questions in these sections are due at the beginning of class.


Th, 7/27. Lecture: Quiz 3 on Chapters 4 and 5

Week 5

M, 7/31. Lecture: The integral. The Fundamental Theorem of Calculus. Lecture 12 on Sections 6.1, 6.2, and 6.3. Detailed responses to the questions in these sections are due at the beginning of class.

M, 7/31, Recitation section/Workshop: Questions and answers. Work in groups on Homework 5.

T, 8/1. Lecture: Review.

T, 8/1. Recitation section/Workshop: Questions and answers. Work in groups on Homework 5.

W, 8/2. Lecture: Homework 4 is due. Exam 2 on Chapters 4, 5, and 6.

W, 8/2. Recitation section/Workshop: Review.

Th, 8/3. Lecture: Homework 5 is due. Review

S, 8/5, 3-6 PM: Final exam