

Course Syllabus
Math 560.02
Advanced Calculus I
3 Credits
Fall, 2005

1. **Class meeting information:** Class meets in 418 LDB
Monday and Wednesday 10:00 - 11:30 am
2. **Professor:** Dr. Jacqueline Jensen
Office: 410 Lee Drain
Office Phone: 294-3517
e-mail: jensen@shsu.edu
web-page: http://www.shsu.edu/~mth_jaj
3. **Office Hours:**
Monday 9:00 - 9:30 am
Tuesday 9:30 - 10:00 am
Wednesday 9:00 - 9:30 am
Thursday 9:30 - 10:00 am
and, of course, by appointment.
4. **Course Description:** Advanced calculus will include the study of calculus topics on \mathbb{R}^n , and discuss the topological implications of these ideas.
Students taking Advanced Calculus I must have completed Math 461 and Math 466 with a grade of C or better.
Class will be primarily lecture-oriented.
5. **Course Objectives:**
Students completing this course should have mastery of the following major concepts. Other techniques and ideas will also be covered.
 - sequences
 - compact sets
 - continuity, including uniform continuity and discontinuities
 - limits
 - Mean Value Theorem
 - L'Hospital's rule
 - derivatives
 - Taylor's theorem and as many of the following topics as time allows:
 - definite integrals
 - multiple integrals
 - indefinite integrals

- infinite series
- convergence of series
- double sums
- series of functions
- power series

6. **Required Textbook:**

Advanced Calculus by R. Creighton Buck. ISBN: 1577663020.

7. **Required Supplies:** None.

8. **Attendance Policy:** Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check the web-page for announcements and updated assignments. The professor will keep a record of attendance.

Tardiness: Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class and posted on the web-page.

9. **Assignments:**

- (a) **Homework:** Homework will be assigned in class each day. Homework will be collected, with due dates to be announced in class. Assignments can be found online at:

http://www.shsu.edu/~mth_jaj/math560/duet.f05.html

- (b) **Class participation:** Students are encouraged to attend every class and participate actively by asking questions both in and out of class.

10. **Exams:** There will be two exams during the semester. They are tentatively scheduled to occur on:

Wednesday, 28 September

Wednesday, 2 November

Any changes to this schedule will be announced in class and posted on the web-page.

If a student misses an exam, the student will be allowed to replace that exam score with their score on the final exam if the student takes and passes the next exam at the regularly scheduled time.

The **final exam** will be held on Monday, 12 December from 11:00 am - 1:00 pm. It will be comprehensive.

11. **Grading Plan:** The course grade is based on:

Homework	20%
Exam 1	25%
Exam 2	25%
Final Exam	30%

12. **Academic Dishonesty:** All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on and examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

13. **Classroom Rules of Conduct:** Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university.

Cellular telephones and pagers must be turned off before class begins. Since they are to be turned off, they should not be visible in class. If cell phones become an issue in class, students will be asked to leave if their phone should ring during class.

Students are prohibited from using tobacco products in class, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

14. **Visitors in the Classroom:** Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

15. **Additional Information** All information on this syllabus is subject to change. Any changes will be announced in class.