

Course Syllabus  
Math 364.01  
Introduction to Mathematical Thought  
3 Credits  
Spring, 2005

1. **Class meeting information:** Class meets in 218 LDB  
Tuesday and Thursday 11:00 am - 12:30 pm
  
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](http://www.shsu.edu/~mth_jaj)
  
3. **Office Hours:**  
Monday 9:00 - 10:00 am  
Tuesday 9:30 - 10:30 am  
Wednesday 9:00 - 10:00 am  
Thursday 9:30 - 10:30 am  
and, of course, by appointment.
  
4. **Course Description:**  
This course includes an introduction to sets, logic, the axiomatic method and proof.  
Students taking Math 364 must have completed Math 143 with a grade of C or better or have consent of instructor.
  
5. **Course Objectives:**  
Students completing this course should have mastery of the following major concepts. Other techniques and ideas will also be covered.
  - Logic, including inverse, converse, contrapositive, and negation.
  - Knowledge of techniques of proof, including proof by contradiction, proof by induction, and direct proof.
  - Definitions in set theory, and set operations.
  - Equivalence relations
  - Partitions
  - Functions
  - Other topics as time allows
  
6. **Required Textbook:** A Transition to Advanced Mathematics, 5th edition. By Smith, Eggen, and St. Andre.

7. **Required Supplies:** No other supplies required.
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 under "News".

9. **Assignments:**

- (a) **Homework:** Homework will be assigned in class each day. Homework will not be collected. Assignments can be found online at:

[http://www.shsu.edu/~mth\\_jaj/math364/dues05.html](http://www.shsu.edu/~mth_jaj/math364/dues05.html)

It is your responsibility to ask questions about homework problems which you were not able to complete or did not understand. It is your responsibility to come to office hours, or otherwise contact someone for help. You may contact me via e-mail if you cannot make it to office hours, and I will try to answer questions as clearly as I can via e-mail. It is also your responsibility to do as many problems from each section as you need to in order to feel comfortable with the material.

- (b) **Quizzes:** There will be a quiz in class once per week over the material covered since the previous quiz. Quiz questions will be similar to homework problems assigned. Each quiz will be given during the first 10-15 minutes of class, and extra time will not be allowed if you are late to class, so be sure to be on time. No make-ups are allowed under any circumstances. To compensate for this, at least the lowest quiz score for the semester will be dropped.

**Re-writes:** Also to compensate for the fact that quizzes will happen in a timed environment, you will be allowed to rewrite any problems missed on the quiz. To earn back half of the points missed by submitting a rewrite, the problem needs to be done entirely correctly. The rewritten solution should be attached to the original quiz (rewrite on top), and must be handed in at the beginning of the next class period.

**Other quiz scores:** I reserve the right to have in-class worksheets unannounced which will count as quiz scores.

- (c) **Class participation:** Students may be asked to share their solutions to problems. This will be on a volunteer basis. During student presentations, the rest of the class is encouraged to ask questions, and to think critically about the solution presented by the classmate. More specific guidelines will be provided.

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

Thursday, 17 February and  
Thursday, 7 April.

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

**Make-ups:** 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 Thursday, 12 May, 2004 from 11:00 am - 1:00 pm in our regular classroom. It will be comprehensive.

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

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

The course grade will be assigned via the following table:

Percentage earned	Grade
90-100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
0 - 59	F

There is no additional curve in this class, and no extra credit, so keep up as the semester progresses.

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.