Syllabus for Math 6342
Point-Set Topology

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Instructor Web Site: www.math.uh.edu/∼tomforde
Course Web Site: www.math.uh.edu/∼tomforde/Math6342.html

Office Hours: By Appointment. (I'm also free 2:00 – 2:30PM MWF.)

Note About Office Hours: I encourage you to come by my office if you have any questions, need help with homework problems, or would just like to talk about the material. If for some reason you are unable to make it to Office Hours, you are welcome to email me to set up an appointment for another time.

Meeting Times: MWF 1:00 – 2:00PM in 345 PGH.

Prerequisites: MATH 4331 and MATH 4337 or consent of instructor.

Course Description: This course is an introduction to point-set topology. Topics include compactness, connectedness, quotient spaces, separation properties, Tychonoff's theorem, the Urysohn lemma, Tietze's theorem, and the characterization of separable metric spaces.

It is expected that students will be proficient in reading and writing proofs. Proofs in homework should be written in textbook style. In particular, you should keep the following in mind:

(1) Writing mathematics requires full English sentences, with the understanding that certain mathematical symbols can replace the words they represent. (So, for instance, the phrase "x is a member of the set of real numbers and x^2 is not equal to 4" may be written as "$x \in \mathbb{R}$ and $x^2 \neq 4$".)

(2) When you write up a proof I will grade it for the way it is written as well as the ideas that are in it. Consequently, you should follow the rules of English usage, such as using proper grammar and punctuation.

(3) Your proofs will be graded on the degree to which they are: Correct, Clear, and Concise

Text: The textbook used for this course is *Topology (2ⁿᵈ Ed.)*, by James R. Munkres.

Course Web Page: The course web page is located at

www.math.uh.edu/∼tomforde/Math6342.html

On the course web page you will find the homework as it is assigned, as well as a copy of this syllabus, exam dates, and announcements as they are made.

Grading: The final grade for the class will be determined as follows:

Class Participation:	10%
Homework:	25%
Exam 1:	20%
Exam 2:	20%
Final Exam:	25%

Attendance: It is vital to attend every lecture and take careful notes. Some lecture material does not appear in the textbook. Questions on the exams will be drawn from homework, reading, and lectures. I also encourage you to ask questions and participate in class. As stated above, 10% of your final grade will be based on class participation.

Reading: Reading assignments will be given weekly on the course web page. Completing the reading assignments is just as critical as doing the written homework.

Homework: A list of homework problems will be given on the course web page, roughly every two weeks.

With regards to the homework that is turned in, the following policies will be in effect:

- Your homework should contain your name printed clearly.

- If your homework is more than one page it should be stapled in the upper left-hand corner.

- Homework must be turned in at the beginning of class on the day it is due. Late homework will not be accepted.

- Homework that is not picked up within two weeks of the date it is handed back will be discarded.

- Your lowest homework score throughout the term will be dropped when calculating your final grade.

Doing the homework is esssential. Remember . . .

"You learn mathematics by doing mathematics."

Exams: There will be three exams: two midterm exams during the semester and one final exam at the end of the semester. Each exam will have two parts: (1) an in-class portion that will test your knowledge of definitions, statements of theorems, and basic concepts; and (2) a take-home portion that will require you to answer more involved questions and write proofs.

Exam 1: In-Class portion on Sept. 22, Take-Home portion due Sept. 26

Exam 2: In-Class portion on Oct. 20, Take-Home portion due Oct. 24

Final: In-Class portion on Wed., Dec. 17, 2–5PM, Take-Home due then.

It is University of Houston policy that final exams are not subject to rescheduling, so please do not make plans to leave the Houston area until after the final exam time.

Makeup Policy: In general, missing an In-Class Exam results in a score of zero. Likewise, not turning in a Take-Home Exam when it is due results in a score of zero, and you will not be allowed to make up the work. Exceptions may be made in the case of extreme circumstances, such as a documented, serious illness. In the event that you cannot be present on the day an exam is held or due you need to speak to me *in advance*, and make every attempt to turn in the the exam *before* (and not after) the rest of the class.

Policy on Incompletes: Incompletes are given only in very unusual circumstances, and never just to prevent a bad grade or provide the student with more time to prepare for an exam.

Honor Principal: University of Houston students are expected to adhere to the Academic Honesty Policy (see the Student Handbook for more details). In this course this shall mean the following: Homework can and should be worked on and discussed with others. However, the write-up should be independent and in your own words. In addition, exams shall be worked on independently. In-class exams will be closed book. For take-home exams, you are allowed to use your textbook, homework, and class notes, but you are not allowed to use outside books or talk with anyone except the instructor. In addition, if you are aware of anyone who is cheating or receiving unfair outside assistance, you are honor bound to inform the instructor of what is occurring.

Anyone caught cheating will receive a failing grade in the course, and be turned over to the department chair and dean for further disciplinary action.

Special Needs: Any student with a disability or chronic health problem for whom special accommodations would be helpful is encouraged to discuss with the instructor the types of assistance that might be offered.