



Percolation Theory

Math 7/8046 Fall 2020

TR 9:40 - 11:05 am, Dunn Hall 107

Instructor Dr. James T. Campbell

Office/Contact Dunn Hall 213, jcampbll@memphis.edu

Office Hours In this era of Covid, office hours will be via Zoom, and by appointment. Students should not hesitate to ask for a Zoom meeting if they would like to speak with me about anything course-related.

Text *Percolation*, 2nd edition, by Geoffrey Grimmett (Springer 1999). We will cover as much of the first 8 chapters as we can, although the occasional random walk may occur.

Exams None.

Homework Homework assignments will be bi-weekly. The 7000-level students will have more computationally based problems, 8000-level students will have more general, theory based problems (extending results to different lattices, etc.). More than just getting answers, students will be expected to discuss solutions in the class, as a group. We care more about deeper understanding than quick resolution.

Presentation 7000-level students will select a topic, perhaps from the back sections of the book (which contain various extensions of the basic results) to present to the class at the end of the term. 8000-level students will select a research paper to present. (Percolation is an active field, this will be an essential part of the course for them.)

Grading The grade will be based 60% on homework, 40% on the presentation. Grading Scale: A: 90-100 %; B: 77-89% ; C: 65-76% ; D: 60-64% . \pm grades will be given, top 2 in each band will be +, bottom 2 in each band will be -.

Covid-19 Health and Safety Policy – Masks and Social Distancing

All students, faculty and staff will wear masks in all public spaces, including our classroom per the COVID-19 policy. The first time a student enters our classroom without wearing a face covering, the student will be asked to leave the class until they return with a covering. Further violations will be referred to the Office of Student Accountability. Students who repeatedly or flagrantly violate these community expectations may be referred for discipline under the Student Code and, if appropriate, immediately removed from campus by the Dean of Students.

Student Health Students who are experiencing symptoms such as sneezing, coughing or a higher than normal temperature should inform me by email so they can be excused from class and should stay home. Students should contact their health care provider or the Student Health Center at <https://www.memphis.edu/health/>.

Students who have a positive COVID-19 test should contact the Dean of Students via email at Dean of Students.

Student Accommodations Students seeking to remain remote for health or other serious reasons should discuss their options with me.

Student Resources Students who need additional resources can contact the Dean of Students Office at <https://www.memphis.edu/deanofstudents/crisis/index.php>.

For further information see <https://www.memphis.edu/msci/news/covid.php>