## **Dynamical Systems** MA 760-1B, Fall 2001

Mire 100 1D, 1 all 2001

Class meets Mondays and Wednesdays 9:05am-10:20am in Seminar Room (458 CH)

Instructor: Dr. Nikolai Chernov

**Texts:** Several textbooks will be occasionally used in this course. Two most basic ones are

- P. Walters, An Introduction to Ergodic Theory, Springer 1982
- M. Pollicott, Lectures of ergodic theory and Pesin theory on compact manifolds, Cambridge University Press, 1993

Two other helpful texts are

- M. Pollicott & M. Yuri, Dynamical Systems and Ergodic Theory, Cambridge University Press, 1998
- G. Keller, Equilibrium States in Ergodic Theory, Cambridge University Press, 1998

All these books should be in our reading room (they have been ordered), and I will make multiple copies of selected pages for all the students in class. So, you do not have to buy these book, although this would be a good idea if you plan to specialize in dynamical systems. I will type class notes and post them on my web page in PDF format at

http://www.math.uab.edu/chernov/teaching/teach.html

**Homework**: There are exercises in my classnotes, which I consider as homework. Ideally, I expect you to do (or at least, figure out how to do) all the exercises. Specific assignments will be given weekly.