

MATH673 — SPRING 2021

DYNAMICAL SYSTEMS

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Office Hours: R 9.00–10.00 and by appointment.
Webpage: <http://math.gmu.edu/~harbir/m673/>

Textbook: Alligood, Sauer and Yorke, *Chaos: An Introduction to Dynamical Systems*, Springer 2000.

The Course: We will cover material from the first 12 Chapters — pretty much everything from the early chapters and then skipping and skimming some material depending on the time available.

Each weekend I will post a video on Blackboard that you should watch in its entirety as well as reading the relevant parts of the book. I will also set homework questions from the exercises in the book. During the class on Thursday I will answer questions and go through the homework exercises but not cover any new material. I do expect you all to attend and be prepared each week and you should email me ahead of time if you cannot be there.

My office hours are via email. I will be available to immediately answer questions.

The course will be graded on the basis of a mid-term (25%) on March 18th, a (cumulative) final exam (50%) and two numerical projects (25%). No outside materials will be allowed during the exams.

The homework problems set should not be handed in but you are **STRONGLY** advised to study them and write out your solutions properly. You are also encouraged to discuss these problems amongst yourselves and make use of the email office hours. I will go through many of the homework problems in the following class and you will not benefit from this if you have not made a serious attempt at them beforehand.