

SYLLABUS

MATHEMATICS FAST TRACK SEMINAR

MA 490 , SPRING 2024

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF ALABAMA AT BIRMINGHAM

Course Instructor: Dr. Atanas Stefanov

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Office Hours: Wednesday 11:00-noon, UH 4049

Course Info

Meeting time: ???

Meeting location: UH 4004

Credits: 1 hour

Textbook: *Mathematical Models in Epidemiology*, by Brauer, Castillo-Chavez and Feng. With a foreword by Simon Levin. Texts in Applied Mathematics, 69. Springer, New York, 2019.

Topics to be covered: YOU DO NOT NEED TO BUY THE BOOK. I have uploaded Chapters 1, 2, 3 in the CANVAS module section for this class. We will mostly concentrate on Chapter 2, the additional material is provided for context and further explorations.

Course Description

This course is designed for students in the Mathematics Fast Track Program. Students are expected to actively participate in class as well as present new material, as assigned. The main theme is the modeling of infectious diseases through compartmental models in ODE's. This is a niche area of applied mathematics, which may lead to deeper and more substantive models, using partial differential equations.

Important Dates

First day of classes: January 8.

Last Day to drop (without paying full tuition): January 16

Spring break: March 10-16.

Last Day of class: April 19.

Exams:

There are no exams planned for this course. Your grade will be based on class participation and presentations.

DSS Accessibility Statement

Accessible Learning: UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, and you require accommodations, contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact me to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted DSS, please call (205) 934-4205 or visit the DSS website.

Title IX Statement

The University of Alabama at Birmingham is committed to providing an environment that is free from sexual misconduct, which includes gender-based assault, harassment, exploitation, dating and domestic violence, stalking, as well as discrimination based on sex, sexual orientation, gender identity, and gender expression. If you have experienced any of the aforementioned conduct we encourage you to report the incident. UAB provides several avenues for reporting. For more information about Title IX, policy, reporting, protections, resources and supports, please visit the UAB Title IX webpage for UAB's Title IX Sex Discrimination, Sexual Harassment, and Sexual Violence Policy; UAB's Equal Opportunity and Discriminatory Harassment Policy; and the Duty to Report and Non-Retaliation Policy.