

Syllabus Fall 2020

BINF 701-001/BIOS 701-001 - Systems Biology

George Mason University, Bioinformatic and computational biology

INSTRUCTOR: Aman Ullah.

Locations/times: Lecture: Tuesday 1:30PM - 4:10PM, SciTech (PW): Colgan Hall 304B

Phone: (703) 993-7182; **Email:** aullah3@gmu.edu

Office Hour: Tuesday: 10:00 PM-1:00 PM or by appointment in (Colgan Hall), Room: 322

Prerequisite: Admission to the Ph.D. program in biosciences or bioinformatics, CHEM 663 or equivalent.

Objective of the course: Introduction to systems biology with an emphasis on approaches currently employed and the types of scientific questions studied.

TEXTBOOK: A first course in system biology (2nd Edition) by Eberhard O. Voit.

Grading Policy: The course grade will be determined as follows:

Activities:	Percent of Final Grade:
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Mid-Term Project -	30%
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Final Exam -	40%
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Final Project -	30%
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Grades are assigned on the following basis:

90 to 100%: A;

80 to 89.99%: B;

70 to 79.99%: C;

60 to 69.99%: D;

Less than 60%: F.

Students are expected to attend lecture and participate in class. Students are expected to take initiative and read references referred in lecture.

Academic Honesty Policy:

Academic dishonesty will not be tolerated. This includes cheating, plagiarism, and falsification of academic records. That being said, you can help each other out on the homework (this does not mean that you can copy each other's homework).

Tentative Course Schedule:

Tuesday, August 25 - Introduction to Systems Biology, Chapter 1

Tuesday, September 1 - Chapter 2

Tuesday, September 8 - Chapter 3

Tuesday, September 15 - Chapter 4

Tuesday, September 22- Chapter 5

Tuesday, September 29 – Midterm Project

Tuesday, October 6 - Chapter 7

Tuesday, October 13 - No class due to Fall Break

Tuesday, October 20 - Chapter 8

Tuesday, October 27 – Chapter 9

Tuesday, November 3 - Calcium Signaling

Tuesday, November 10 - Physiological Modeling: The heart as an example

Tuesday, November 17 - Chapter 10

Tuesday, November 24 - Final Project

Tuesday, December 1st -Final Projects

Tuesday, December 8 - Final Exam 4:30-7:10

Changes if needed will be announced in the class.