qBio II

Tuesday, January 31st – Thursday, March 16th, 2017
Tuesdays & Thursdays, 5:00 PM – 6:30 PM
Location: Physiology Department Conference Room
1300 York Avenue; 5th Floor, Room LC-504
Final Presentations: Tuesday, March 7th & Thursday, March 9th (5:00 PM – 8:00 PM)
Final Exam: Thursday, March 16th (5:00 PM – 8:00 PM)

Course Directors:

• Jason Banfelder (jbanfelder@rockefeller.edu)
• Michael LeVine (mil2037@med.cornell.edu)

This course will be fully graded: (Honors, High Pass, Low Pass, Fail)

Class Sessions and Lecture Notes

1. Introduction to Dynamic Systems and Linear Difference Equations
   Tuesday, January 31st, 2017

2. Periodic Behavior and Complex Eigenvalues
   Thursday February 2nd, 2017

3. A First Look at Eigenvectors
   Tuesday, February 7th, 2017

4. Linear Difference Equations Laboratory
   Thursday, February 9th, 2017

5. Representing Time Dependent Phenomena with ODEs
   Tuesday, February 14th, 2017

6. Stability and Linearization of ODEs (part I)
   Thursday, February 16th, 2017

7. Stability and Linearization of ODEs (part II)
   Tuesday, February 21st, 2017

8. ODE Laboratory
   Thursday, February 23rd, 2017

9. Markov Chains and Hidden Markov Models
   Tuesday, February 28th, 2017
10. **Fourier Analysis and Signal Processing**
   Thursday, March 2nd, 2017

11. Final Presentations (part I)
    Tuesday, March 7th, 2017 (5:00 PM - 8:00 PM)

12. Final Presentations (part II)
    Thursday, March 9th, 2017 (5:00 PM - 8:00 PM)

13. FINAL EXAM (5:00 PM - 8:00 PM)
    Thursday, March 16th, 2016