

MATH 7875-009  
Mathematical Biology Journal Club (1 credit)  
Fall 2019

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Journal Club Website:  
[www.math.utah.edu/research/mathbio/journalclub/journalclub.html](http://www.math.utah.edu/research/mathbio/journalclub/journalclub.html)

COURSE DESCRIPTION: Journal Club is a 1-hour weekly course designed to aid students in their transition from undergrad to graduate school. This course will provide students with the opportunity to develop their skills in reading, discussing, and presenting mathematics papers in the area of mathematical biology. It will also serve as a place where students can discuss their concerns regarding graduate school or teaching with their peers.

FORMAT: Each week one student will give a 50 minute presentation of a mathematical biology paper.

- Fall Semester: All students will give a “chalk talk” format presentation. First year students will choose a paper from list of suggested journal articles. Second year students may choose any paper.
- Spring Semester: First year students will give a “chalk talk” format presentation and second year students will give a beamer/powerpoint format presentation (Beamer preferred). All students may choose any paper to present.

This presentation should be structured as follows:

- 10 minutes introduction/background,
- 15 minutes of methods,
- 15 minutes of results,
- 5 minutes of discussion, and
- a brief (5 min) recap of your presentation.

## EXPECTATIONS:

- Presentation:
  - Each student will be expected to prepare a 50 minute presentation of a Math Bio Journal Article using the provided guidelines.
  - Each student (**first and second year**) will also prepare for a pre-presentation meeting with Bridget and Jake to discuss their presentation content and the paper content as needed. **This meeting should take place about one week prior to your presentation and each student is expected to bring their presentation notes to their pre-presentation meeting.**
  - Second year students are expected to discuss paper content with a faculty member and first year students are encouraged to do so.
  - After presenting, each student will debrief with Bridget and Jake and will **submit their presentation notes.**
  
- Participation:
  - On the days you are not presenting you will be expected to come prepared for discussion, by reading the article to be presented and preparing an **article summary, focusing specifically on the following:** abstract, figures and key equations. Focusing on these components, submit a brief summary addressing the following questions:
    - \* What are the main question(s)/hypotheses addressed by the article?
    - \* What techniques did the authors use to address them?
    - \* What are the main results of the paper?

Summaries may be handwritten or typed. Content may be in paragraph form or complete sentence bullets. In addition to the questions required for the article summary you may want to consider one or more of the following questions to help you come *prepared* for discussion:

  - \* What assumptions did the author(s) make in constructing their model?
  - \* According to the author(s), do the results answer the question(s)/support their hypothesis? Why or why not?
  - \* Do you agree with the author(s)? Do you feel that the results support the author(s) conclusions?
  - \* Do you have any additional questions/comments about the paper content?
- Each student will be expected to be an *active participant* in Journal Club discussions.

## IMPORTANT DATES

- Wednesday, August 28 – Paper Selections Due