Presenting a Journal Article

As you prepare your presentation it is important to keep in mind that your classmates come from a broad range of backgrounds and experience. Some of you have extensive biology background and limited applied math experience. Others have significant math experience but haven’t seen a biology course since their freshman year of undergrad (or high school). Your goal as a presenter is to communicate an organized, self-contained “story” that communicates the biology and math in your article to a broad audience.

Each presentation should be divided into 5 parts:

• Introduction/Background (10 min)
  – A quick overview in which you talk us through the outline of your talk. (Outline should be written on the board)
  – Biology Background: Begin broad (why do we care?) and narrow down into the specifics needed to understand the model. You should not assume any prior knowledge from your audience. Use figures as needed - sometimes the papers will include diagrams that you can reproduce on the board, other times you will need to create your own.
  – Statement of the questions/hypothesis presented by the author(s).
  – Statement of the type of math that is going to be used to address these questions.
  – Statement of the assumptions made by the author(s).

• Explanation of the Math Model/Calculations/Analysis (15 min) If your paper is long you may need to pick and choose which calculations to demonstrate explicitly. We will discuss this in your pre-presentation meeting.

• Results (15 min) If the paper has a lot of figures you may need to choose the key results to present. We will discuss this in your pre-presentation meeting.

• Discussion of Results (5 min)
  – What conclusions did the author(s) come to?
  – Do you agree with their conclusions?
  – What further directions could you take this research? What further directions did the author(s) suggest.

• Recap – Briefly summarize your presentation: what was the question, how was it addressed, what were the results and what was the conclusion. (5 min)

As you present your goal should be to face your audience as much as possible and ask for questions as needed. We will pause for questions and discussion after each section of your presentation.
Suggested Presenter Schedule:

- **Three weeks prior to your presentation date:** Learn and reproduce the paper content
  - Begin working through your article to be sure you understand the content and calculations.
  - Work on reproducing the figures in your article.

- **Two weeks prior to your presentation date:** Prepare for your pre-presentation meeting
  - Prepare a draft of your presentation notes or beamer presentation
  - Prepare a list of questions to discuss with Ben and Samantha (and potentially a faculty member)

- **One week prior to your presentation date:**
  (Presentation dates will be posted on the course webpage)
  - First year students will meet with Ben and Samantha to discuss their paper and presentation outline, and to go through any questions they may have about the paper content.
  - Second year students are strongly encouraged to meet with a faculty member to discuss the content of their paper and will also meet with Ben and Samantha to discuss their presentation.

- **Each student is expected to bring their presentation notes to their pre-presentation meeting.**

- Following your presentation – Each student will meet briefly with Ben and Samantha for a presentation debrief.