Reading a Journal Article

We will be reading and discussing a broad range of articles this semester and covering many types of mathematics and biology in our discussions. Each of you has your own academic background and experience and you may find some articles easy to understand while your classmates find them challenging (and vice versa). This is completely normal. Reading academic papers is very different from other types of reading. It is a very rare paper that makes complete sense the first time through. You should plan on reading each paper at least twice and perhaps three times if you find the content particularly challenging.

As you read you will probably not understand everything in the paper. That's okay – this is why we will be discussing and listening to presentations each week. Instead of making it your goal to understand each paper 100% your goal should be able to describe the following to someone who has not read the paper:

- What biological questions or hypothesis are posed by the author(s) of the paper? (There may be one or several and they may be explicitly stated or implied.)

- What type of mathematics did the author use to address the question(s).

- What assumptions did the author make when constructing their model?

- What were the results of the calculations/simulations? (Note: "Results" are the factual observations without interpretation.)

- Can you give a one-sentence description of what is being depicted in each figure? If the paper is challenging your description may be general, but if you have taken the time to formulate description you will have an easier time participating in the discussion.