The paper discussions are 30 min student-led discussions of a published paper, with the paper assigned a week in advance. Each week, a team of 3 or 4 students will lead this discussion. Everyone else is expected to read the paper and submit a question via catalyst by 5pm on the day before the discussion. Each student will help to lead one presentation during the course; all students will be involved in the weekly class discussion.

Undergraduates and graduates are expected to cover the material of the paper and to hypothesize on future directions or relevance of the work. Undergraduates are expected to draw on material in lectures; graduates are expected to draw additionally on material in assigned graduate readings and articles of their own finding.

**Non-presenting students** should (after reading and digesting the paper) submit, via the class catalyst website, a question (< 500 characters) on the research presented in the paper. For example, this question might involve relating the topic of the paper to material presented in class, challenging some part of the analysis or methods, or inquiring about an extension of the work. Other examples will be given in class.

**Presenting students:** The team of 3 or 4 students will present the main points of the paper in a ~ 15-min oral presentation (each student should present some slides) followed by a ~ 15-min class discussion. Both the presentation and discussion should be divided evenly between the presenting students.

Feedback on the pre-submitted questions will be given to the whole class. Individual feedback on the presentations will be emailed to the presenters following each presentation. Grades for presentations will be assigned after all presentations have been given.

Below are some hints for an effective presentation. The overall goal is to improve understanding of the science, ability to present to others, and skill at discussing results and ideas.

1) **Science content:**
   - Present the material of the paper accurately.
   - Carefully select the specific material to present (not everything can be presented in 15 min).
   - Briefly explain how the material fits into a bigger picture.

2) **Comprehension:**
   - Show that you understand the main results and mechanisms discussed (not necessarily all the small details, but certainly the key points of the paper) well enough to explain them to others.
   - Give an example of how the main message can be applied beyond the topic of the paper.

3) **Informative presentation:**
   - Prepare clear, easy-to-comprehend slides and practice your verbal presentation.
   - Choose easily visible fonts and colors, and only enough to convey the point.
   - Talk to the audience, not the screen. Use a pointer, so you don’t turn your back on the audience.
   - Show your interest in the work.
   - Ask yourself if this is a presentation you would like to hear.
   - If you cut and paste pdf figures into slides, remember always to add the citation.

4) **Guiding the discussion:**
   - Strive for balance between giving information and getting input from others.
   - Keep the discussion under control (redirect, as needed).
   - Help start the discussion by asking, for example, what was effective or ineffective about the paper? Do others have a different take on the main point? If you did not understand some aspect, can others shed light on it? Jody and Rebecca will select from the submitted questions to contribute to this discussion.

**Timing:** The presentation should be prepared so that, without interruption, it is no longer than 15 min. Interruptions from the class during the presentation to gain clarity on various points are encouraged, given the discussion form of the assignment, but will obviously slow down the presentation. Part of your job as discussion leaders is not only to allow an appropriate amount of time for discussion but also to keep it under control. An overall target time for the presentation and discussion, including interruptions during the presentation, is 30 min.

25th March 2016