Journal Article Review Presentations

The Journal Article Review Presentations represent 10% of the total grade for the course (for Graduate Students). This is a group project. You will work in groups of 2-3 students. Groups smaller than 2 or larger than 3 are not allowed. A sign-up sheet will be made available the first week of class.

Guidelines for the Presenters

Description:

For your journal article review presentations, you will present your assigned article in class. You will have the full 50 min class period. You can use slides, handouts, quizzes, simulations, tutorials, interactive media, and any combination of these to present the main points of the article to the class and stimulate and engaging discussion. Feel free to be creative – the class is yours for the day!

Your presentation, regardless of form, must answer the following questions about the article:

1) Where does this article fit in the broader literature on the subject? Why is it relevant?
2) What is the goal, research question, and/or hypotheses presented?
3) What methods were employed (both experimental and modeling), and are they appropriate?
4) What were the main results and conclusions of the paper?
5) What are the limitations?
6) What future questions does this study lead to?

In addition to your in-class presentation, you will submit a half-page summary of the paper briefly describing the research question, approach, results and significance.

Deliverables:

1) In-Class Presentation
2) Paper summary (1/2 page) submitted on Canvas

Grading:

Your grade will be mainly determined based on the clarity with which the above questions are answered and the amount of class engagement and discussion stimulated with your presentation. This will be a team grade and will determine 10% of your grade.

Journal Article List

1. Collins SH, Wiggin MB, Sawicki GS. Reducing the energy cost of human walking using an unpowered exoskeleton. Nature. 2015
2. Lee SM, Piazza SJ. Built for speed: musculoskeletal structure and sprinting ability. J. Exp Biol. 2009
3. Simpson CS, Welker CG, Uhlrich SD, …, Hawkes EW. Connecting the legs with a spring improved human running economy. J. Exp. Biol. 2019
4. Flash T, Hogan N. The coordination of arm movements: an experimentally confirmed mathematical model. J Neurosci. 1985;5: 1688–1703.
5. Shadmehr R, Mussa-Ivaldi FA. Adaptive representation of dynamics during learning of a motor task. J Neurosci. 1994;14: 3208–3224.
6. Körding K, Wolpert D. Bayesian integration in sensorimotor learning. Nature. 2004;427: 244–247.
7. Selinger JC, O'Connor SM, Wong JD, Donelan JM. Humans can continuously optimize energetic cost during walking. Curr. Biol. 2015
8. Shadmehr R, Huang HJ, Ahmed AA. A Representation of Effort in Decision-Making and Motor Control. Curr Biol. 2016