Discussion Questions
Week 1
(papers are available on the course website)

READ:

Tinbergen (1963) On aims and methods of Ethology
(reprinted Animal Biology, Vol. 55, No. 4, pp. 297-321 2005)

Vessey and Drickamer (2010) "Integration of Proximate and Ultimate Causes" Pp. 180-185. In: M. D. Breed and J. Moore, eds. Encyclopedia of animal behavior, Volume 2, Oxford: Academic Press.

Bateson & Laland (2013) Tinbergen's four questions: an appreciation and an update. TREE 28:712-718.

READ: One of the following

Strassman (2014) Tribute to Tinbergen: The Place of Animal Behavior in Biology. Ethology 120:123

Stamp-Dawkins (2014) Tribute to Tinbergen: Questions and how to Answer them. Ethology 120:120

Taborsky (2014) Tribute to Tinbergen: The Four Problems of Biology. A Critical Appraisal. Ethology 120:224

Prepare answers to the following questions.

Students are encouraged to work together and discuss these questions but each student should prepare their own set of answers. You may use compete sentences, bullet points, diagrams etc. format is not constrained. If convenient, please type your answers. Bring you answers **and** be prepared to discuss **and** amend your responses before handing them in.

1) Tinbergen repeatedly breaks categories down using dichotomies. Make a list or graphical representation of the many divisions discussed by Tinbergen and the scientific field most relevant to each question. Vessey and Drickamer make arguments for integration across questions. How would this change Tingbergen's 4 questions.

2) Bateson & Laland describe many advances related to each of Tinbergen's 4 questions. Places each of these in relation to Tinbergen's initial "question". Do you think we should consider each of these as a "sub question" or do we need a new classification scheme?

4) Read one of the additional "Tribute to Tinbergen" papers. Look the author up online and explain why these person is qualified to write the paper they have written. In what way does the paper you read alter your perspective on Tinbergen's classification scheme.