New course! BI 3052 - Study Design in Biology

This is a course aimed for all MSc students in biology, across all study programs and specializations. The course will provide a down-to-earth introduction to all issues of importance when designing a good study in biology, including the students' MSc projects.

The course will be run by Trond Amundsen, Jon Wright (course manager) and Christophe Pelabon as an intensive course in weeks 36 (31/8 – 4/9) and 38 (14/9 – 18/9).

Tentative course outline (subject to modification):

1. Introduction: Why design is important
2. Asking questions: theories and hypotheses, and how to test them
3. Experimental vs. non-experimental studies, and laboratory vs. field studies
4. What about statistics?
5. Replication, pseudoreplication and levels of analysis
6. Confounding effects and controls in observations and experiments
7. Observer reliabilities, biases and disturbance effects
8. Experimental designs
9. Making measurements

The syllabus of the course comprises the book Experimental design for the life sciences by Ruxton and Colegrave (3rd ed, Oxford Univ Press 2011) plus some additional literature provided during the course or posted on its learning before the course. The book should be read before the course starts. The exam is on Friday in the second course week.

Please contact Jon for further information about the course.