

Phylogenetics Workshop, May 12th-June 25th

Instructors: Sean Graham (swgraham@interchange.ubc.ca) and Wayne Maddison (wmaddisn@mail.ubc.ca)

This workshop is intended to help answer questions in phylogenetic analysis ranging from the mechanical to the theoretical including:

Topics include:

- 1) How do I run the programs?
- 2) What does this algorithm do, and why does it work?
- 3) Why choose one phylogenetic method and not another?
- 4) Should I believe this tree and this model of evolution? Will the reviewers believe it?
- 5) I've got my tree—now what do I do with it?

Instructors:

Sean Graham swgraham@mail.ubc.ca

Wayne Maddison wmaddisn@mail.ubc.ca

Format:

Lectures/Discussion: 9-10 AM, (Mo), Tu, W, Th, Fri, starting May 12th/last lecture slot Jun 15th (project due June 25th). BioSci Rm. 4223 (west wing of BioSci).

Labs: 10 AM-12 PM, (Mo), Tu, W, Th, Fri, Rm 1018/ZooLab computer room (first floor in Bio. Sci. bldg).

Note: Class will normally take place Tues-Fri (except Wk 2, Mon-Thurs); see schedule for details.

Credit: Register for summer session 2013, for **Biology 525B**. If you are a grad student, please sign up either for an 'audit' or (preferably) for a mark. Having a number of students enrolled helps justify giving the course again. Students taking the course must complete all homework and conduct a formal analysis of a dataset. For a mark, students must write up results from an analysis as a short, standard research paper with an abstract, introduction, materials and methods, results, discussion, references, tables and figures. Also for a mark, student groups of two or three present a 20-25 minute explanation of some phylogenetic method or set of programs not covered in the lecture portion of the course.

Questions? Please contact Sean Graham (swgraham@interchange.ubc.ca) or Wayne Maddison (wmaddisn@mail.ubc.ca)

Course marks:

20% Homework and participation

60% Original research paper based on phylogenetic analysis

20% Oral presentation of phylogenetic method