

SPRING 2009 - Tentative schedule Systematic Biology Class 5345A/G.	
week 1	History and Definitions
12-Jan-09	Outlining syllabus contents. Introduction (importance of systematics). Test Quiz (not graded)
14-Jan-09	The work of a systematist in the 21st century (visit the US National Tick Collection).
15-Jan-09	LAB project: Individual molecular LAB project assignment; searching GenBank; literature search.
16-Jan-09	Historical Context. Introducing principles of biosystematics. Species definition. Speciation.
week 2	Lab project A
19-Jan-09	Read assigned paper, discuss with class and instructor. Test Quiz (not graded)
21-Jan-09	Example: How to present introductory part of presentation. LAB project: literature search, sequence selection in GenBank.
22-Jan-09	LAB project: literature search, sequence selection in GenBank.
23-Jan-09	Quiz #1 (History and definitions).
week 3	Morphology in Systematic Biology
26-Jan-09	Hands-on practical examples leading to definition of characters and character states.
28-Jan-09	Building taxonomic keys, use of taxonomic keys.
29-Jan-09	Use of taxonomic keys (practical exercise)
30-Jan-09	Test Quiz (not graded) . Example: How to prepare a written proposal.
week 4	Lab project B
2-Feb-09	Student presentations I (discussion of rationale, methods; defining structure and topics for the written proposal)
4-Feb-09	Student presentations I (discussion of rationale, methods; defining structure and topics for the written proposal)
5-Feb-09	Student presentations I (discussion of rationale, methods; defining structure and topics for the written proposal)
6-Feb-09	Quiz #2 (Morphology).
week 5	Molecular Systematic Biology A
9-Feb-09	Phylogenetics: introduction.
11-Feb-09	Sequence alignment. Critical use of software.
12-Feb-09	LAB project: finish extracting sequences from GenBank, align sequences.
13-Feb-09	LAB project: finish extracting sequences from GenBank, align sequences. Distribute written proposals in class.
week 6	Molecular Systematic Biology B
16-Feb-09	Class discussion on written proposals: how to readdress content or structural issues?
18-Feb-09	LAB project: final corrections in written proposals.
19-Feb-09	LAB project: finish extracting sequences from GenBank, align sequences.
20-Feb-09	Parsimony methods. Deadline for written proposal (final version).
week 7	Molecular Systematic Biology C
23-Feb-09	Parsimony methods and practice.
25-Feb-09	LAB project: finish alignments.
26-Feb-09	LAB project: parsimony analysis, bootstrapping.
27-Feb-09	Distance methods and practice
week 8	Molecular Systematic Biology D
2-Mar-09	LAB project: distance analysis. Test Quiz (not graded)

4-Mar-09	Example: How to prepare presentation II.
5-Mar-09	Maximum likelihood methods and Bayesian analysis. LAB projects: maximum likelihood and Bayesian practice.
6-Mar-09	Quiz #3 (Molecular phylogenetics #1)
week 9	Molecular Systematic Biology E
9-Mar-09	LAB projects: maximum likelihood and Bayesian practice.
11-Mar-09	LAB projects: comparing methods.
12-Mar-09	LAB projects: comparing methods and finish data analysis.
13-Mar-09	LAB projects: finish data analysis.
week 10	Molecular Systematic Biology F
23-Mar-09	LAB projects: finish data analysis. Test Quiz (not graded)
25-Mar-09	LAB projects: finish data analysis .
26-Mar-09	LAB projects: prepare presentation II.
27-Mar-09	Quiz #4 (Molecular phylogenetics #2)
week 11	Population genetics A
30-Mar-09	Population genetics: introduction.
1-Apr-09	Read population genetic papers #1-2.
2-Apr-09	Instructor presents paper on population genetics #1.
3-Apr-09	Discussion on population genetics paper # 1.
week 12	Population genetics B
6-Apr-09	Instructor presents paper on population genetics #2. Discussion. Test Quiz (not graded)
8-Apr-09	Population genetics software: practice.
9-Apr-09	Population genetics software: practice.
10-Apr-09	Quiz #5 (population genetics)
week 13	LAB project
13-Apr-09	LAB projects: prepare presentation II.
15-Apr-09	LAB projects: prepare presentation II.
16-Apr-09	LAB projects: prepare presentation II.
17-Apr-09	LAB projects: prepare presentation II.
week 14	LAB project
20-Apr-09	Student project: presentation II (presentation results, comparison to published data, critical discussion)
22-Apr-09	Student project: presentation II (presentation results, comparison to published data, critical discussion)
23-Apr-09	Student project: presentation II (presentation results, comparison to published data, critical discussion)
24-Apr-09	Revision Quiz (not graded).
week 15	Revisions
27-Apr-09	Revision (History)
29-Apr-09	Revision (Morphology)
30-Apr-09	Revision (Molecular methods)
1-May-09	Revision (Molecular methods)

week 16	Revisions + Exams
4-May-09	Revision (Population genetics)
5-May-09	Final exam

Evaluation