FORMAT 2

governing curriculum & course changes.

Museum / Bio Wildlife

College

Department

committee. Creating two

is there undergraduate and graduate level content
ng overtaxed?; 3) are graduate students being
ees a
committee has grave

by the Graduate Academic and Advising C

versions are sufficiently different (1
being offered); 2) are undergraduates bei
undertaxed? In this context, the committ
taking the course. Typically,
see URL at top of this page.

involved. Add lines at end of form for additional
signatures.

approved by the college or school's curriculum
committee. Furthermore, any core course
must be approved by the core review committee.

compressed into
compressed to less than six weeks

full semester

OTHER FORMAT (spec

Mode of delivery

RECEIVED

SEP 20 2012

Natural Science & Mathematics

for the baccalaureate core?

"Take" symbol will be add

YES | | NO | X

instructor. (Cross-listed with ANS F450.) (3+0)

BIOL F615 Systematic and Comparative Biology

Fall Even-numbered Years

AFTER ALL CHANGES ARE MADE

BIOL F615 Systematic and Comparative Biology

phylogenetic an

standing in

APPROVALS: (Addi

Syst[illegible]

[illegible] Lemmon, A.-M. (eds). Cambridge Univ. Press, 2nd Edition (2009). Additional required papers [illegible] via Blackboard.

Course description: Concepts of systematic biology basic to a rigorous and complete [illegible]

[illegible] bioinformatics [illegible]

Math [illegible] Note: Offered Alterna[illegible] Recommended: [illegible]

Course instruction will consist of [illegible] and [illegible] reading and classroom discussion. Expect to spend 6h per week preparing and [illegible]

[illegible] the course should be able to evaluate the quality of, and know how to produce, both traditional taxonomic and statistical phylogenetic studies.

Student learning outcomes: Students will learn how to describe a new species using both morphological and molecular methods and will learn the rules of the International Code of Zoological Nomenclature. Students will learn how to estimate the phylogeny of a group of taxa or populations using various marker systems and analytical methods.

Instructional methods: lecture, lab, group discussion of primary literature, preparation

of an project involving a phylogenetic analysis.

Evaluation: The course grade will be based on the following:

Component	Proportion of grade
Lab & take home exercises	25%
Midterm exam	20%
Project	20%
Final exam (cumulative in part)	30%
Participation	5%

A +	96.7 -	100 %	C +	76.7	-	79 %
A	93.4 -	96.6 %	C	73.4	-	76.6 %

When you plagiarize you are stealing the currency which science (and many other endeavors) uses: knowledge. Plagiarism and cheating are serious offenses that violate the

26(f) lec. 23. Discussion of readings
(tbd) lab. 8. – Model Choice

29(m) lec. 24. MP & ML continued, assessment, tree confidence

[redacted]

2(m) lec. 26. Discussion of readings

[redacted]

5(m) lec. 27. Bayesian Phylogenetic Inference 1
7(w) lec. 28. Bayesian Phylogenetic Inference 2

[redacted]

9(f) lec. 29. Discussion of readings
(tbd) lab. 10. – MrBayes

12(m) lec. 30. Bayesian Inference 3 & Ancestral state reconstruction
14(w) lec. 31. Ancestral state reconstruction 2
16(f) lec. 32. Discussion of readings
(tbd) lab. 11. – work on projects or optional ACSR labs