

## **Tentative Syllabus - Spring 2009**

### **Systematic Biology - BIOL5345A/G (CRN 16450/16451)**

**Instructor:** Lorenza Beati; e-mail: [lorenzabeati@georgiasouthern.edu](mailto:lorenzabeati@georgiasouthern.edu)

**Office Hour:** Wed 3.30-4.30 pm (IAP Building, room 2008) or by appointment (phone: 681-5564 or 0553).

**Text:** Instructor will provide photocopies or reprints in advance, when necessary.

#### **Class time and place:**

Mon 1.00-1.50 pm; Wed 1.00-1.50 pm; Thu 11.00 am-1.50pm; Fri 1.00-1.50 pm, room 2030 Math/Physics building.

#### **Course outline and learning outcome:**

This course introduces the principles and methods of biosystematics in an interactive way. It is not organized in a class/laboratory fashion. Lectures and practical hands-on work alternate in all periods and theoretical instruction is followed by its immediate application in the lab and at the computer.

Each student is assigned a publication-based molecular phylogeny project, which includes finding and reading relevant literature, writing a small proposal, power-point presentations, gathering molecular data from web-based sources, analyzing molecular data and producing results, critically discussing and comparing results to published data.

At the end of the semester the student is expected to be informed on basic concepts in biosystematics; to know how to retrieve taxonomic information from various sources; to identify taxonomically significant characters from selected taxonomic groups; to analyze morphological and molecular data; to carry out a phylogenetic project from sequences to data presentation; and to be able to provide a better informed opinion on biosystematic issues.

#### **Evaluation criteria**

**5%** Active participation during course

**10%** Practical and computational skills (working with GenBank, finding data, constructing phylogenies)

**10%** Proposal, writing skills (4% introduction; 1% material and methods; 1% expected results; 4% bibliographic search).

**15%** Presentation I: background, scopes, and methods (5% literature search; 5% presentation; 5% proposed project)

**25%** Presentation II: overall summary of scopes and methods, results, discussion and critical evaluation of obtained results, comparison with

published data, critical evaluation of published data (10% quality and originality of presentation; 5% results; 10% discussion). **Graduate students will analyze an additional publication and present it to the class (Presentation II = 15%; presentation of additional publication = 10% for grad students only).**

**25%** Quiz results (5 quizzes, 5 questions in each quiz, each question 1%)

**10% Final Exam**

**Grade distribution: 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; and < 60% = F.**

**Attendance policy:** Students are expected to attend all lectures and directly supervised practical exercises for this course. Two missed classes are admitted without penalty if justified by important medical conditions. Attendance sheets will be passed out at beginning of each class. Each additional missed class will cost 1% of the final grade. Disruption of class or any part of the learning process will not be tolerated. Cell phones, blackberries, iPhones, text-messagers, iPods, and related electronic tools must be switched off during classes. Students who violate the GSU Student Conduct Code will be reported to the Judicial Affairs Office; the minimum penalty for misconduct is course failure.

**Students with disabilities:** Any student with a physical disability can contact the instructor in confidence regarding special requirements or other situations.

This syllabus is to be considered as a guideline, which can be modified by the instructor, if circumstances require her to do so.