# Biophysics 101 / Genetics 224 / HST 508 / BIO E-101 Genomics and Computational Biology

## **Course requirements**

5 problem sets, each accounting for 14% of the final grade. See <a href="http://www.courses.fas.harvard.edu/~bphys101/problemsets/index.html">http://www.courses.fas.harvard.edu/~bphys101/problemsets/index.html</a> for the schedule.

1 final project, accounting for 30% of the final grade. The paper will be due Dec. 2<sup>nd</sup>, with oral presentations on Dec. 2<sup>nd</sup>, Dec. 9<sup>th</sup> and Dec. 16<sup>th</sup>.

#### **Problem Set Policies**

- 1) Problem sets are due by **8pm EST of the appropriate Tuesday**.
- 2) All students should **submit the problem sets electronically to the course account:** <a href="mailto:bphys101@fas.harvard.edu">bphys101@fas.harvard.edu</a>. If your email reaches us, you'll receive an auto-reply, which will serve as a record for your submission. Please keep the auto-reply email till you receive your grade.
- 3) Submit your problem set as a Microsoft Word document (preferred) or plain text. Program code and excel spreadsheet need to be submitted as a separate file. All files should be submitted as attachment in one single email. Begin filenames of all submitted files with your first name and last initial, followed by the problem set number, ending with your TF's initials, e.g. JohnH\_ps1\_LZ.doc.
- 4) Answers will be posted on the web 48 hours later.
- 5) Late problem sets will have 5% deducted per day, with a maximum of 10%. No credit will be given to submissions made after answers are posted (i.e., after 8pm Thursday).
- 6) We encourage you to work with other people but you must follow these two rules:
  - a. Put the names of those you worked with on your submitted problem set.
  - b. Neither the written answers nor code can be identical between any two submissions, i.e. put everything into your own words (or code).
- 7) We will answer questions and give advice on the problem sets but will not confirm particular answers before they are submitted.
- 8) If a resource needed for the problem set becomes unavailable or is unusable for any reason, contact us immediately. If we cannot resolve the problem quickly enough in our judgment to finish the assignment on time, we will take action to ensure this is not held against the students. It is not acceptable to merely inform us of the problem in your answers. You are responsible for any fixes sent to you by the course staff.

### **Course Website:**

The course website is

http://www.courses.fas.harvard.edu/~bphys101/index.html. Please check frequently, especially the News section for updates and announcements.

## Final project:

- 1) We strongly recommend that you start choosing a topic and team before the end of Oct. We also encourage you to use the course discussion board <a href="http://www.courses.fas.harvard.edu/cgi-bin/webx/WebX?14@@/bphys101">http://www.courses.fas.harvard.edu/cgi-bin/webx/WebX?14@@/bphys101</a> to find project partners and develop topic ideas. A list of last year's project ideas can be found at
- http://www.courses.fas.harvard.edu/~bphys101/projects/project\_ideas\_2002.html.
- 2) The full written project in the form of an article or grant proposal as well as the figures ready for (MS Powerpoint or Word) presentation is **due Dec 2 at noon** to the bphys101 account (If you are in the first group, you should get your slides emailed to us and confirm functioning in our hands by **9 AM Dec 2**.). We strongly recommend that you start choosing a topic and team before the end of Oct.
- 2) The oral presentation will be limited to 6 minutes per person on each project team. This will give us 2 minutes (per group) for questions at the end. The presentations will be loaded on the computer in order of the schedule below, unless special requests are made.
- 3) Each team must have at least one computational "result". This can be as simple as checking a table in a published article or as complex as a new computational-biology algorithm and associated graphics.
- 4) There should be critical assessment of at least one previous relevant article.
- 5) Please cite and link pubmed or web references wherever possible.
- 6) The role that each member played in the team should be clearly stated in the written version. Each team member should present a substantial contribution orally, not merely introduce the final speaker(s).
- 7) The total email disk limit per project is 1 Mbyte for presentation (MS-word or ppt) and text (MSWord). If this is a problem, the figures can typically be reduced to an appropriate size with MSpaint or adobephotoshop and the whole file compressed in zip format. The recommended word limit is 1000 to 3000 words per project (excluding figure legends and references).