CS 3824: Introduction to Computational Biology and Bioinformatics
Syllabus
Fall, 2011

1 General Course Information

<table>
<thead>
<tr>
<th>CRN</th>
<th>97828</th>
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<tbody>
<tr>
<td>MEETING TIME</td>
<td>3:30 AM–4:45 AM; Tuesday/Thursday</td>
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<tr>
<td>CLASSROOM</td>
<td>McBryde 223</td>
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</tbody>
</table>

Instructor: Lenwood S. Heath

- **Office**: 2160J Torgersen Hall
- **Office Hours**: 9:30–11 Tuesdays and Thursdays
- **Email**: heath@vt.edu

Co-Instructors: Yang Cao, T. M. Murali, and Alexey Onufriev

Web Site: http://courses.cs.vt.edu/cs3824/Fall2011/index.php

Class Listserv: CS3824.97828@listserv.vt.edu

Prerequisites: CS 3114


Books On Reserve: For current list, see class web site.
2 Course Description

This course introduces computational biology and bioinformatics (CBB) through hands-on learning experiences. The emphasis is on problem solving in CBB, especially through algorithms. The breadth of topics covered include a subset of the following: structural bioinformatics; modeling and simulation of biological networks; computational sequence analysis; algorithms for reconstructing phylogenies; computational systems biology; and data mining algorithms.

3 Grading Policy

Grading for the course is on a 1000-point scale, with the points distributed as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Homework assignments: 6 at 100 points each</td>
<td>600</td>
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<tr>
<td>Course project</td>
<td>400</td>
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</tbody>
</table>

All homework must be prepared with \LaTeX\ or other word processing system, printed, and submitted in class on the due date\(^2\). Use of \LaTeX\ is strongly recommended, though not absolutely required. **No late homework will be accepted.**

4 Readings

For most classes, there is a reading assignment to be completed by class time. See the course web site about one week prior to the class date.

5 Ethics

The Honor Code applies. All work submitted must be the student’s own work. A student may solicit help with homework assignments only from the instructors. However, the course project is done in a collaborative fashion that does allow students to work as a team.

6 Announcement

If any student needs special accommodations because of a disability, please contact Professor Heath during the first week of classes.

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\(^1\)See \LaTeX\ resources on the course web site.

\(^2\)See due dates on the Calendar on the course web site.