CS 3824: Introduction to Computational Biology and Bioinformatics
Syllabus
Fall, 2015

1 General Course Information

<table>
<thead>
<tr>
<th>CRN</th>
<th>82197</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Time</td>
<td>12:30 PM–1:45 PM; Tuesday/Thursday</td>
</tr>
<tr>
<td>Classroom</td>
<td>McBryde 308</td>
</tr>
</tbody>
</table>

Instructor: Lenwood S. Heath
- Office: 2160J Torgersen Hall
- Office Hours: 9:00–11:00 Tuesdays and Thursdays
- Email: heath@vt.edu

Teaching Assistant: Doaa Altarawy
- Office Hours Held in: 2160U Torgersen Hall
- Office Hours: 2:30–4:30 Mondays and Fridays
- Email: doaa2012@vt.edu

Web Site: http://courses.cs.vt.edu/cs3824/Fall2015/index.php

Piazza: Sign up for Piazza here
https://piazza.com/vt/fall2015/cs3824

Scholar: Used for grades and homework submission.

Prerequisites: CS 3114


Books On Reserve: For current list, see course 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>Homework assignments: 6 at 100 points each</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course project:</td>
<td>400</td>
</tr>
</tbody>
</table>

All homework must be prepared with \LaTeX\ or other word processing system and submitted as a PDF through Scholar on the due date\(^2\). Use of \LaTeX\ is strongly recommended, though not absolutely required. **No late homework will be accepted.** There is a course project that will require collaboration among two or three students as a project team. See details on the course web site.

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 homework submitted must be the student’s own work. A student may solicit help with homework assignments only from the instructor. 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.

---

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

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