Seminar in BioHealth Informatics-INFO-B531

Course Info: 3 Credit hours
Location: Classroom
Prerequisites: None

COURSE DESCRIPTION
This course is intended to enhance the learning experiences of BioHealth Informatics graduate students by providing them with expert-led clinics, topical discussions, and projects that emphasizes joining disparate knowledge domains within the subfields of Bio- and Health Informatics.

EXTENDED COURSE DESCRIPTION

Rationale & Theme Purpose:
This course is intended to teach graduate students in BioHealth Informatics skills and knowledge they will need to succeed in and outside the classroom. Students will participate in expert-led clinics, discussions, and projects on topics of importance to health informatics, bioinformatics, scholarship, and professionalism. Key topics include breakthroughs and emerging research in biomedical informatics, professional communication, and the ethical conduct of research.

Required Text: TBD.

Core competencies: The purpose of this course is based in enhancing several core competencies of Master (MS)-level students in the Department of BioHealth Informatics at Indiana University IUPUI-Indianapolis. These competencies include but are not limited to:

- Critical analysis of the scholarly literature pertaining to bioinformatics, health informatics, and related disciplines.
- Cross-disciplinary critical thinking across different sub-fields in BioHealth Informatics.
- Analysis of data and information in order to derive novel and relevant conclusions not seen elsewhere in the literature
- Data & information representation (including visualization)
- Active and meaningful participation in discussion with experts and peers during class time
• Teamwork skills: Leadership and membership
• Ability to clearly communicate logic via verbal (oral) and written communications
• Competent scientific writing in the English language

**Learning Outcomes:** The learning outcomes are based upon achieving the aforementioned core competencies. Through taking this course, students will be able to:
• Explore knowledge domain(s) that s/he is not familiar with
• Analyze quantitative data with appropriate analysis tools and tests
• Represent data and information in a cohesive and comprehensible manner
• Participate as an effective member of an Informatics research team
• Communicate effectively in scientific English language

**Grading:**
Your grades will be updated on Canvas. However, if you want your grade updated, please see the instructor. The course is graded out of 100.00 percentage points. Please note that the percentage grading scale below is in pure percent and not points. The grading scale is based off the official SOIC graduate grading rubric of Indiana University and is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA</th>
<th>Percentage Range</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
<td>(Only at faculty’s discretion)</td>
<td>Usually, exemplary quality of work and the #1 grade in the class.</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>93.00% and above</td>
<td>Work goes above and beyond all expectations for the class.</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>90.00% to 92.99%</td>
<td>Work meets all requirements for the class; problems are minimal.</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>87.00% to 89.99%</td>
<td>Average to slightly above average quality; problems are typical.</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>83.00% to 86.99%</td>
<td>Somewhat marginal work; significant problems but acceptable.</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>80.00% to 82.99%</td>
<td>Very marginal; LOWEST PASSING GRADE.</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>77.00% to 79.99%</td>
<td>Unacceptable work. COURSE MUST BE REPEATED.</td>
</tr>
</tbody>
</table>

**ASSIGNMENTS**

- Attendance (20%)
- Participation (20%)
- Homework (30%)
- Final project (30%)

**Principles of Graduate & Professional Learning (PGPL):** Learning outcomes are assessed via grading the above assignments in the following areas:

- Knowledge & Skills Mastery (K&S)
- Critical Thinking & Good Judgment (CT)
- Effective Communication (EC)
- Ethical Behavior (EB)
As such, fulfillment of the PGPL is done by the following general areas:

- Students must attend in person (20%) and participate actively in regular course sessions (20%).
- Students will complete homework assignments (30%).
- A final individual or group project will be completed on a topic in the field of BHI. More details about the final project will be posted (30%).

**EXPECTATIONS, GUIDELINES, AND POLICIES**

**Attendance:**
Class attendance is required for classroom-based courses. It entails being present and attentive for the entire class period. Attendance is officially assessed by a pop quiz during the course period. In some cases, the quiz will be about your assigned reading and will be administered in the first 5 minutes of class. In other cases, the quiz will cover in-class content and will be administered in the middle or end of the class. The instructor is required to submit to the Registrar a record of student attendance, and action shall be taken if the record conveys a trend of absenteeism. Illness or a death in the immediate family is usually the only acceptable excuse for absence from class. Absences must be explained to the satisfaction of the instructor, who will decide whether omitted work may be made up. To protect your privacy, doctor’s excuses should exclude the nature of the condition and focus instead on how the condition effects on your coursework.

Missing class reduces your grade through the following grade reduction policy: You are allowed two excused or unexcused absences. Regardless of the reason, a third absence results in a 5% reduction in your final grade and a fourth absence results in a 10% reduction. Further absences result in an F in the course. Missing class may also reduce your grade by eliminating opportunities for class participation.

**Incomplete:**
The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year.

You can find out more about the University's Incomplete policies at:
http://registrar.iupui.edu/incomp.html

**Deliverables:**
You are responsible for completing any applicable deliverable by its deadline and submitting it by the specified method. Deadlines will be posted on Canvas or announced in class. In fairness to the instructor and students who completed their work on time, a grade on a deliverable shall be reduced 10%, if it is submitted late and a further 10% for each 24-hour period it is submitted after the deadline.
**Quizzes:**
Quizzes will test students’ retention of content they read or heard in class. The timing or content of quizzes is not announced before class. Note that some quizzes are administered in the first 5 minutes, in the middle of, or end of the class period.