LIS5418 – Introduction to Health Informatics – 3 credits

Mode of Instruction: online

Students all meet with instructor for class weekly, synchronously, using a multi-media conferencing system such as Collaborate, at a specific class time indicated in the University’s course schedule for each semester. Additional asynchronous interactions among students and with instructor will be required, as indicated below in course evaluation and assessments, to complete the course.

Instructor:
Email:
Office:
Phone:
Course Location/Website:
Office Hours:
Teaching Assistant:
TA Email:

COURSE DESCRIPTION:
Growing healthcare costs has generated the need for information specialists knowledgeable about emerging technical solutions that can help improve healthcare delivery and health decision-making not only for clinicians but also for patients and general health consumers. A growing number of healthcare providers are investing in information systems that will affect their operations and practices. Health consumers are taking a more proactive role in their healthcare to manage and navigate an increasingly complex healthcare environment and to live healthier lives. This survey course evaluates health informatics from a stakeholder perspective and provides an overview of the role of information professionals in this emerging interdisciplinary field. The course begins with a brief overview of the US healthcare system then discusses to what extent technology can be used to meet the health information needs of various users such as providers of healthcare services, clinicians, health educators, consumers, patients, and caregivers.

COURSE OBJECTIVES:
At the end of this course, successful students should be able to...
1. Describe the theoretical and practical foundations of health informatics;
2. Explain how information and communication technologies are changing healthcare services and provision of health information;
3. Discuss the various applications of information and communication technology for healthcare, health promotion and patient self-management;
4. Discuss key issues related to the adoption of health information technology systems (digital divide, health literacy, policy issues, privacy and security); and
5. Explore emerging trends in health informatics.

COURSE MATERIALS:

Required Textbook:
A current textbook similar in content and price to this textbook will be required and will be assigned no later than the university deadline for textbook assignments:


Required Readings:
A list of readings will also be provided on the course site. Students will have at least 3 readings per topic.

COURSE ASSIGNMENTS AND EVALUATION:

1. **Read & React Discussion Posts (20% - 10 posts on different weeks)** – This requirement comes in two parts.
   - **READ & REFLECT**: Read at least 3 of the articles on the reading list for each week (at least one article per topic if there is more than one for that week). Post your reflections and critical comments on the course topic/s on 10 different weeks of your choice. For each post: (a) identify 2 main takeaways from the week’s readings (synthesize what you learned from all the articles you read taken as a whole – not one at a time) and (b) briefly explain why these resonated with you - these should be critical reflections and NOT summaries. Discussion board postings must be substantive and at least 150 words. Original posts must be submitted by midnight EST on the Monday before the topic will be discussed in class. At the end of each post, list the articles you chose to read for that week. Use APA 6th format for your citations.
   - **REACT**: Post a substantive comment on another student’s posting for that week. These comments must be substantive (at least 100 words long) and must be posted no later than midnight EST on Friday the week the topic is covered in class.

2. **Current Research/Trends/Issues Presentation (10%)** - Deliver a brief 8-10 minute presentation about current research/trends/issues related to the course topics and lead a class discussion about this. The presentation may focus on either one of the following:
   - **Current Research** - Findings from an original research study, its main contribution/s to the
field or current thinking, as well as its practical and/or theoretical implications. This must be based on an article published in a reputable peer-reviewed journal in the last 3 years. **NOTE:** Consult your professor about the appropriateness of your peer-reviewed article before finalizing your choice.

b. **Current Trends/Issues** - A critical review of a current trend/issue related to the course topic being addressed. The trend or issue may be related to new health information technologies, user issues, or policies impacting HIT use or implementation. This must be based on current and credible resources (published report, news item, statistics, peer-reviewed article, etc. published in the last year). **NOTE:** Consult your professor about the appropriateness of your topic before finalizing your choice.

After the brief presentation, ask at least 2 critical questions about the topic for the class to discuss.

3. **Detailed Outline and Annotated Bibliography (20%)** - Prior to writing the final paper and to get guidance on whether you are on the right track, you will submit a detailed outline for the proposal and an annotated bibliography. For the latter, you will search for and critically evaluate 5 peer-reviewed journal articles published in the last 5 years. After reading and analyzing each resource critically, you will write an annotated bibliography for each source. For each peer-reviewed article, you need to provide the complete bibliographic citation AND a 350-400 word annotation. The annotation must not be a repetition of what is in the abstract – rather, it should be a critical evaluation of the study’s main findings and how it supports your proposed final paper. All resources must be cited using APA 6th citation style. The Annotated Bibliography is a good way to start thinking about your final paper and refining your main argument – if you do a good job with it, you will have basically done at least 1/3 of the work for your final paper.

4. **Final Research Paper (30%)** - For the final research paper you are required to explore, in more depth, a health informatics topic or issue of your choosing. In consultation with your professor, you will identify a current health informatics topic or issue and write an original, evidence-based paper focusing on any of the following: trends and patterns, policy or ethical issues, theory and research. As part of the exercise, you are required to provide an overview of the topic or issue, critically review and analyze scholarly literature and present this as evidence for your main argument or thesis, identify and discuss gaps in the literature, and recommend areas for future research. The paper should be about 3000 to 4000 words (this word count does not include the bibliography, or any figures or tables presented).

5. **Final Paper Presentation (10%)** – At the end of the semester you will share the results of your research with the class in a 6- to 8-minute presentation.

6. **Class Activities (5%)** – We will have class activities on selected weeks (these will be indicated in the course modules). These may include search activities, short quizzes, case studies or team challenges.

**GRADE CALCULATION:**

Grades will be distributed in the following manner:
REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Current Research/Trends/Issues Presentation</td>
<td>10</td>
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<tr>
<td>Detailed Outline and Annotated Bibliography</td>
<td>20</td>
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<tr>
<td>Final Research Paper</td>
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<tr>
<td>Final Presentation</td>
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<td>Read &amp; React Discussion Posts (minimum of 10 on different weeks)</td>
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<td>Class Activities</td>
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<td>Attendance</td>
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<td><strong>TOTAL</strong></td>
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GRADING SCALE:

- A: 93-100
- A-: 90-92
- B+: 87-89
- B: 83-86
- B-: 80-82
- C+: 77-79
- C: 73-76
- C-: 70-72
- D+: 67-69
- D: 63-66
- D-: 60-62
- F: 0-59

COURSE TOPICS:

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<tr>
<th>WEEK</th>
<th>TOPICS</th>
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<tr>
<td>Week 1</td>
<td>Course Overview</td>
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<tr>
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<td>What is Health Informatics?</td>
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<td>Week 2</td>
<td>History and Evolution of HIT</td>
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<td>Healthcare Data, Information and Knowledge</td>
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<td>Week 3</td>
<td>Clinical Information Systems</td>
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<td>Electronic Health Records &amp; Electronic Medical Records</td>
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<td>Week 4</td>
<td>Evidence-Based Medicine</td>
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<td>Clinical Decision Support Systems</td>
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<td>Week 5</td>
<td>Computerized Physician Order Entry System</td>
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<td>ePrescribing</td>
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<td>Week 6</td>
<td>EHR Implementation</td>
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<td>Health Information Exchange</td>
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<td>Week 7</td>
<td>Health IT Privacy and Security Issues</td>
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<td>Clinical Research Informatics</td>
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<td>Week 8</td>
<td>Telemedicine and Telehealth</td>
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<td>Week 9</td>
<td>Consumer Health Informatics</td>
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<td>Personal Health Records/ Patient Portals</td>
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<td>Week 10</td>
<td>Patient Self-Management and Education Systems</td>
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<td>Week 11</td>
<td>Health Literacy and Digital Divide Issues</td>
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<td>Week 12</td>
<td>Mobile Technology and mHealth</td>
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<td>Week 13</td>
<td>Public Health Informatics</td>
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<td>Disease Management and Disease Registries</td>
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WEEK | TOPICS
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Week 14 | Emerging Technology
Week 15 | Presentations

SCHOOL OR DISCIPLINARY POLICIES:

Copyright Statement

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Technology, Education, And Copyright Harmonization (TEACH) Act (refer to the 3/7/2001 TEACH Act at www.copyright.gov/legislation/archive/).

Sexual Harassment Policy

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. http://registrar.fsu.edu/bulletin/graduate/information/university_notices/

iSchool Hardware and Software Requirements

A list of all hardware and software requirements for students participating in the School of Information (iSchool) courses can be found at the following location: http://ischool.cci.fsu.edu/academics/online/requirements/

Student Eligibility for an Incomplete Grade

Incomplete (“I”) grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy:

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida
State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy.)

**Americans With Disabilities Act:**

Students with disabilities needing academic accommodation should:
(1) register with and provide documentation to the Student Disability Resource Center; and
(2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrd@admin.fsu.edu
http://www.disabilitycenter.fsu.edu/

**Syllabus Change Policy**

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."