

**LIS 667 Health Informatics**

 **Fall 2024**

August 21-December 13

**Contact Instructor:**

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Associate Professor

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**Office Hours**: Monday, Tuesday and Thursday 9am-1pm

**Note**: I prefer that you contact me via email. I generally respond within 24 hours. If you don’t get a response, please email me again after 2 days.

**Drop Dates**

August 28 Wednesday is Last day to add/drop Full Term classes without academic or financial penalty without a grade of W and receive full tuition credit; October 31 Thursday is Last day to withdraw from full term and receive a W grade. (Request to withdraw must be submitted in SOAR by 5:00 pm.)

**Prerequisite(s)**: No

**Number of Credit Hours**: 3

**Nature of Students:** Graduate

**Classroom Session**: Mondays 6:30-7:59pm Central Time in Canvas Live Classroom; 1st class meeting will be on August 26 Monday at 6:30 Central time. Join Zoom: Join URL: <https://usm-edu.zoom.us/j/83811527109>

**Course Description/Overview**

Health informatics is an interdisciplinary field that utilizes information, technology and data in healthcare operations and services.

This course will introduce a variety of topics in health informatics and address their connection with health sciences librarianship. Specific topics will include information management and technology, clinic and bioinformatics, data standards and interoperability, data security and privacy, evidence-based medicine, consumer health informatics, and health literacy and education. To better grasp informatics concepts and skills, students will participate in online chats, interactive discussions, case studies, and projects.

**Course learning objectives**:

●Understand what health informatics is and its role in today’s healthcare industry and health sciences libraries’ services

●Develop levels of awareness of health information resources, data, and technology tools

●Be able to plan, design, implement, evaluate the use of health data, information, and technology

●Synthesize and apply empirical research literature to inform health science practices and services

●Demonstrate the use of one or more health informatics tools and associated technologies

●Develop a health informatics project for a related community

**Required Textbook and Readings:**

1. Most readings related to the course are listed with topics under Modules in Canvas



1. *Kronenfeld, M. R., & Kronenfeld, J. J. (2021). A History of Medical Libraries and Medical Librarianship: From John Shaw Billings to the Digital Era (1st ed.). Rowman & Littlefield Publishers, Incorporated. (available USM libraries online -ebook)*

Content related to the medical librarianship is extracted from the following ebooks:

* Stribling, J. C. (2020). *The clinical medical librarian's handbook* (USM libraries e-book)
* Nelson, H. (2014). *Systematic reviews to answer health care questions*. Philadelphia, PA: Wolters health. (USM Libraries e-book)
* Nelson, R., & Staggers, N. (Eds.). (2018). *Health informatics: an interprofessional approach* (Second edition.). Elsevier.
* Young, L. M. & Hinton, E. (2019). *Framing health care instruction: An information literacy handbook for the health sciences.* (USM Libraries e-book)

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**Technology Competencies:** Students will gain competencies in using technology for communication and information purposes. They will be expected to use email, web-based instructional interfaces, web-facilitated synchronous discussion, and word processing software. They will also be expected to use online databases, USM e-reserves, and the Internet to gather information for assignments.

**Teaching Techniques/Methods Used in Course:** Online lectures, web discussions, and directed readings form the basis of the course. Most readings will be from the text, but supplemental readings from journals and the Internet will be included as appropriate, and can be pursued individually.

**Course Format**

The online learning management systems(Canvas) course site provides a central focus for class communications, online course materials, and learning modules. Student will need web access to use the learning management.

Online Communications Protocol

* Students should check the course site regularly – at least several times a week, if not daily, for postings, announcements, etc.
* Post to the site’s Discussions tool questions, responses to questions, and comments about course content and technologies; the instructor will read site postings several times a week and respond as appropriate

**Technology**

Reliable Internet access is required.

**Assignments**

Participation (10%)

Exercises (20%): evaluate and access health informatics tools.

Discussions (20%): read and summarize required readings.

Case studies (20%): analyze and identify problems and solutions to medical scenarios.

Creating health informatics projects (30%): research and develop presentations

**Grading**

Grade Distribution

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| --- | --- |
| **Assignment** | **Weight** |
| Participation (attendance and contribution) | 10% |
| Discussions (4) +self-introduction | 25% |
| Exercises (3) | 15% |
| Cases study analyses (4) | 20% |
| Informatics projects (2) | 30% |
| Total | 100% |

Grading System

 

Due Dates

To facilitate timely grading, all assignments must be submitted on time. One-half grade will be deducted for each day an assignment is late (i.e., not submitted at the date/time specified). An exception can be made if a student absolutely cannot meet the deadline AND notifies the instructor before the due date.

Written reports

Both the substantive content of written reports and the quality of the writing will be considered. Substantive content includes completeness and adherence to the assignment, knowledge of appropriate concepts, strong supporting materials, and reasonable conclusions or solutions. Quality of writing covers organization and clarity of expression, appropriate use of references, and correct grammar, punctuation, and spelling. References must be made in APA style or appropriate style manuals. Up to one-half grade will be deducted for inaccurate references.

Style Manual

**MLA Style Manual (https://www.mlanet.org/page/style-manual)**

Extra Credit No assignments for extra credit will be made under any circumstances. A student who is having trouble with regular assignments is strongly encouraged to contact the instructor as early as possible for personal advising.

**Communication**

Communication will be facilitated by way of e-mail, virtual classroom (i.e. chatting), discussion board, and/or telephone. E-mail is used when private discussions are needed between the student and instructor or between students. Discussion Board postings may be done at any time during the week it is due. Virtual classroom sessions will be in real-time - on specified dates and times. Each student is required to furnish an e-mail address in the student roster.

**Academic Integrity**

Academic misconduct involves deception to improve a grade, earn course credit, complete a degree, or create an unfair academic advantage for oneself or disadvantage to another in the academic community. All students at the University of Southern Mississippi should familiarize themselves with the Student Academic Integrity Policy to become familiar with what actions constitute academic misconduct, a violation of that policy. Southern Miss values “an approach to academics, research, and personal conduct based on integrity and civility” and the Student Academic Integrity Policy supports that University value. Forms of academic misconduct may include, but are not limited to:

· Cheating - Cheating is a broad category of academic misconduct characterized by an attempt to gain academic advantage through inappropriate means or impede the academic achievement of others.

· Plagiarism - The use of another person's or source’s words, creative works, or ideas without appropriate quotation or attribution; claiming or submitting for academic credit the work of another.

· Lying - The misrepresentation of one’s academic work, lying to an instructor to increase a grade, or lying to an instructor regarding an academic integrity violation.

· Acquiring or Distributing Information Inappropriately - The act of distributing or obtaining course assignments or examination questions or answers from sources not approved by the instructor or proctor (includes, but is not limited to, unauthorized use of the Internet, test banks associated with course text and previous student work).

· Fabrication or Falsification of Data - Any statement of untruth in any matters related to the academic experience, including but not limited to forgery; false claims of authorship; falsification of information, data, or results derived from or related to research or to laboratory experiments.

· Stealing or Defacing - The act of intentionally taking, transferring, defacing, or destroying, without right or permission, any property related to the academic mission of the University, including an attempt to impede others.

· Multiple Submissions - The submission, more than once, without authorization by any instructors involved, of substantial portions of the same work, including oral reports or work submitted for retaken courses.

· Conspiracy - The act of agreeing or planning with any person to commit any violation of the Student Academic Integrity Policy.

If you commit an act of academic misconduct, sanctions ranging from resubmission of work to course failure may occur to the possibility of receiving a grade of “XF” for the course, which will be on the student’s transcript with the notation “Failure due to academic misconduct.” Should you be accused of academic misconduct, please visit the Academic Integrity Website or email integrity@usm.edu for any questions you may have about your rights and about the academic integrity process. Southern Miss provides many campus resources that are detailed in this syllabus and will be discussed by your professors; please utilize those to help you learn. At Southern Miss, we care about your personal work and learning journey.

**Disability Statement**

If a student has a disability that qualifies under the Americans with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies. Box 8586; Telephone (601) 266-5024; TTY: (601) 266-6837; Fax (601) 266-6035.

**Artificial Intelligence (AI) use policy**

Given the nature of this course, Generative Artificial Intelligence (AI) tools are permitted in this class when usage complements the learning outcomes of the course and assignments. Students are required to cite usage of these tools in academic work and will be provided with examples of how to do so to ensure academic integrity.

 **Course Schedule – Fall 2024**

 **(Subject to Change)**

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| **Weeks** | **Topics (Modules in Canvas)** | **Plans** |
| **August 21(Semester Starts)-25****Aug 26-Sept 1** | * Introduction
* What is informatics?
* Krongfield&Kronfield chapter 1
 | * Review of syllabus
* 1st class meets on August 26, 6:30pm
* Self-introduction due August 26 noon
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| **Sept 2-8****Sept 9-15** | * Health sciences librarianship and libraries & health informatics
* Kronfield& Kronfield chapters 2, 3
 | * No class on Sept 2(labor day)
* 2nd class meets on Sept 9 Monday. 6:30pm
* Discussion 1 due Sept 9 Monday noon
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| **Sept 16-22****Sept 23-29** | * Information management and technology
* Kronfield&Kronfield Chapter 4
 | * 3rd class meets on Sept 16 Monday. 6:30pm
* 4th class meets on Sept 23 Monday 6:30pm
* Discussion #2 due Sept 16
* Case study #1 due Sept 23
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| **Sept 30-Oct 6****Oct 7-13** | * Clinical and bioinformatics
* Kronfield& Kronfield chapter 5
 | * 5th class meets on Sept 30 at 6:30pm
* 6th class meets on Oct 7 at 6:30pm
* Exercise 1 digital health tool evaluation due Oct 2 Wednesday noon
* Discussion 3 due Oct 7 Monday noon
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| **Oct 14-20****Oct 21-27** | * Evidence-based medicine and practice
* Kronfield& Kronfield chapters 6
 | * 7th class meets on Oct 14 Monday at 6:30pm
* 8th class meets on Oct 21 Monday at 6:30pm
* Case study #2 Oct 14 Monday noon
* Exercise 2 formulating PICO questions due Oct 23 Wednesday noon
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| **Oct 28-Nov 3** | Consumer health informaticsGuest speaking | * 9th class meets on Oct 28 Monday. 6:30pm
* Case study #3 October 28 Monday noon
* Project #1 Information literacy infographic due Oct 30 Wednesday noon
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| **Nov 4-17** | * Quality health information resources and evaluation
* Kronfield& Kronfield chapter7
 | * 10th class meets on Nov 4th Monday. 6:30-8pm
* Exercise 3 MeSH due Nov 6 Wednesday noon
* Discussion 4 due Nov 4 Monday noon
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| **Nov 18-24****Nov 25-Dec 1** | Data science & Artificial intelligence, data security and privacy | * 11th class meets on Nov 18th Monday 6:30-8pm
* 12th class meets on Nov 25
* Case study #4 Nov 25 Monday noon
* Project #2 Outreach plan due Dec 4 Wednesday noon
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Updated 09/23/2024