**Health Informatics Seminar Series**

**(INLS 770)**

**Spring 2016**

**University of North Carolina at Chapel Hill**

**Day/Time:**

Wednesdays, 4:00-5:00PM

 **Location:**

227 Health Sciences Library

 **Faculty:**

Brian Moynihan

539 Health Sciences Library

Office: (919) 966-5954 [email preferred]

Moynihan@med.unc.edu

 **Office Hours:**

By appointment

 **Target Audience:**

Students in programs at the master’s, doctoral and post-baccalaureate certificate level interested in health informatics practice and research.

 **Prerequisites:**

Admission to a post-baccalaureate certificate or graduate program in a health informatics-related field (e.g., Information and Library Science, Medicine, Nursing, Pharmacy, Public Health), or instructor permission.

**Course Description:**

The course focuses on developing an understanding of current and future directions for the use of information technology to improve the health and health care of patients cared for in the U.S. health system. Students in this course participate in the Duke/UNC Joint Health Informatics Seminar Presentation Series, which is sponsored by Duke Center for Health Informatics and the Carolina Health Informatics Program (CHIP). This series explores key areas in Health Informatics and includes research results, overview of programs of research (both basic and applied), and evaluative projects. Speakers with extensive informatics experience and knowledge from both academia and industry present their work and engage in scholarly discussions during a question and answer period.

**Course Goals and Key Learning Objectives**

The goal of this course is to introduce students to ongoing cutting-edge research, development and innovations in health informatics and add to their basic understanding of the area. At the completion of this course, students will be able to:

1. Describe current research initiatives in health informatics.
2. Understand the challenges involved in applying health information technology in health care settings.
3. Discuss key aspects of successful health informatics implementations.

**Course Requirements**

Seminars: Students are required to attend at least 10 of the scheduled 13 presentations during the semester. Students can attend in person at UNC or Duke, or remotely ([https://www.dchi.duke.edu/education/informaticsseminars](https://www.dchi.duke.edu/education/informatics-seminars) ). Attendance will be taken at UNC by the instructor, and students attending at Duke or remotely will email the instructor during the seminar to report that they are in attendance or when they have completed review of the recorded seminar after the presentation date.

After the seminar, students will prepare a 2-3 paragraph summary of the presentation which will include a question that arose from the talk. *Students will submit the summaries via the course website by 4pm the following Wednesday. Late assignments will have point(s) deducted*.

Presentation: Students will select a health informatics topic that relates to their area(s) of interest and synthesize the knowledge gleaned from the seminar presentations into a presentation which summarizes their key concepts and issues, as well as their personal reflections on the topic. Each student will present their slide presentation to the class during a final in-class meeting of all enrolled students. The final presentation date will be determined during the first two weeks of class. Students will also prepare a list of at least 5 scholarly articles on the presentation topic, and will submit the presentation slides and reference list via the course website.

**Recommended Readings and Related Websites**

Students are encouraged to explore health informatics topics for the class presentation requirement, and based on topics of interest that are presented in the seminar series. There are no required texts or readings, but good sources of health informatics literature are listed here.

Current and past presentations:<https://www.dchi.duke.edu/education/informatics-seminars>

# Health Informatics Journals

Journal of the American Medical Informatics Association

AMIA Annual Symposium Proceedings

Applied Clinical Informatics

BMC Medical Informatics and Decision Making

Journal of Biomedical Informatics

Computers, Informatics, Nursing

JMIR Medical Informatics

Electronic Health Records: A Guide for Clinicians and Administrators (EHR-1). Jerome H. Carter (Ed.), American College of Physicians; 2nd edition, 2008.

 **Evaluation of Student Performance and Grading Scale**

Students will be evaluated for course grades as follows:

|  |  |
| --- | --- |
| **Item**  | **Maximum Points** (%Grade) |
| Seminars- attendance, summary  | 40  |
| Final presentation, reference list  | 60  |
| **TOTAL**  | **100**  |

Based on the current UNC grading scales, the following grades and corresponding numeric ranges are applicable.

Graduate Students

|  |  |
| --- | --- |
| Grad Grade  | Range  |
| H  | 95-100  |
| P  | 80-94  |
| L  | 70-79  |
| F  | 69 or below  |

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The schedule for submission of assignments is as follows:

|  |  |
| --- | --- |
| **Assignment**  | **Due Date**  |
| **Informatics Research Seminars** (schedule on last pg of syllabus)  * Attend Seminars**-** at least 11 of the 13 scheduled seminars: 1/13, 1/20, 1/27, 2/3, 2/10, 2/17, 2/24, 3/2, 3/23, 3/30, 4/6, 4/13, 4/20
* Summary- submit via Sakai Assignments tab

   |   * Seminar: 1/13-4/20 - sign in (or email instructor during seminar)
* Summary: at 4pm one week after seminar
 |
| **Health Informatics Presentation** * Final presentation, Powerpoint slides
* Reference list
 | *Sign up for presentation slot* *(date TBA)*  |

# Grading Criteria for Seminar Attendance & Summaries

|  |  |
| --- | --- |
| **Possible Criteria** **Points**  | **Your Score**  |
| 20  | Attendance: Signs in (or emails instructor at start of seminar) for at least 10 Wednesday seminars during semester. 2 points each.   |   |
| 20  | Summary: 1-2 paragraph summary of seminar, including question that arises from presentation. Due no later than 4pm one week after seminar presentation. 2 points each.  |   |
| **40**  | **Total Possible**  |  |

# Grading Criteria for Final Presentation

|  |  |  |
| --- | --- | --- |
| **Possible Points**  | **Criteria**  | **Your Score**  |
| 5  | Clear topic description  |   |
| 15  | Highlights key observations and content from one or more seminars from this semester’s Health Informatics Research Seminar series.  |   |
| 20  | Presentation demonstrates synthesis and evaluation of seminar presentation and scientific literature; creates new and innovative ways of approaching health informatics problems or issues.  |   |
| 15  | Presentation well-organized, content on slides conveyed clearly and concisely with attention to correct spelling, acronyms spelled out, limited use of jargon |   |
| 5 | Submitted reference list with at least 5 relevant, evidence-based papers from the scientific literature on the topic |  |
| **60** | **Total Possible** |  |

# **Health Informatics Seminar Series Schedule**

<http://chip.unc.edu/duke-unc-health-informatics-seminar-series/>

**Spring 2016 Seminar Schedule**

**All seminars are held from 4:00-5:00 pm in HSL 227**

|  |  |  |
| --- | --- | --- |
| **Date** | **Speaker** | **Topic** |
| 1/13 | Stephen Blackwelder, PhD | Can Truth Have a Single Source? The Challenge of Aligning Health Research and Health Delivery Data |
| 1/20 | Lisa Vizer, PhD | Human-Computer Interaction markers: Using technology interactions to monitor cognitive function |
| 1/27 | Jeff Coghill, MLIS, MA | Kiosk Project: The Laupus Library Experience |
| 2/3 | Russ Waitman, PhD | Introducing PCORnet: The National Patient-Centered Clinical Research Network from a Plains Perspective |
| 2/10 | TBD  |   |
| 2/17 | Christopher Blanchette, PhD  | Finding Patients with Alpha-1 Antitrypsin Deficiency: A Case of Rare Disease Identification Using Administrative Claims Data |
| 2/24 | W. Ed Hammond, PhD, FACMI, FAIMBE, FIMIA, FHL7 | FHIR  - Holy Grail of Interoperability |
| 3/2 |  TBD |   |
| 3/23 | Alexander Tropsha, PhD | Cheminformatics-aided pharmacovigilance: application to Stevens-Johnson Syndrome |
| 3/30 | Alyssa Mansfield Damon, PhD, MHA, MPH | Leveraging Population Data for Efficient Healthcare Delivery |
| 4/6 | Michelle Lyn, MBA | SE Diabetes coalition or Community Health Indicators Project |
| 4/13 | Andrew Anderson, MS | Patient Portal: Engaging Patients |
| 4/20 | Shahriar Nirjon, PhD | Sensor Systems for Mobile Health |