**Health Informatics Seminar Series**

**(INLS 770)**

**Fall 2017**

**University of North Carolina at Chapel Hill**

**Day/Time:**

Wednesdays, 4:00-5:00 PM

**Location:**

227 Health Sciences Library

**Faculty:**

Brian Moynihan, MBA | MSIS | MA

Head of Health Technology and Informatics, [UNC Health Sciences Library](http://hsl.lib.unc.edu/)

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**Get Connected!**

I feel that it is very important for informatics students to have a profile on LinkedIn that they keep at least minimally active. Please connect to me and to CHIP – it can have an immeasurable positive effect on your career in terms of hiring and building your professional network, now and for years to come. You can also put your final project slides up on your profile too.

[Brian on LinkedIn](https://www.linkedin.com/in/brianmoynihan)

[CHIP on LinkedIn](https://www.linkedin.com/company/10122880)

**Office Hours:**

By appointment

**Course Website (on Sakai):**

<https://sakai.unc.edu/portal/site/ab8d2452-8cd3-4bc4-92b3-9cbfab4465fd/>

**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 Joint Health Informatics Seminar Presentation Series, which is sponsored by Duke Center for Health Informatics, the Carolina Health Informatics Program (CHIP), NCCU, UNC-Charlotte, and ECU. 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:

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

**Course Requirements**

Seminars: The course sessions are available to live-stream as well as watching in person. Students are **required to attend in-person for the 2 lectures scheduled at UNC, as well as any additional course sessions for the class such as the interactive session on Nov. 15 and final presentation sessions at the end of the course**. (See parts of schedule below highlighted in blue). Attendance will be taken at UNC by the instructor.

After the seminar, students will prepare a 3-5 paragraph summary of the presentation which will include a question that arose from the talk. **Students are expected to write up 9 (of 11) seminars during the semester.** *Students will submit the summaries via the course website by 4 pm the following Wednesday. Late assignments will have point(s) deducted*.

Introductory Video: Students will create a video introducing themselves to the class, and to respond to other students’ introductory posts. See “Introductions” link on the sidebar of the Sakai site for more information.  
  
Informational Interview\*: Students will have a one-hour informational interview with someone working in a field related to health informatics, preferably in an area closely linked to the student's future area of study. After the interview, students will compose a 2-page summary of the experience including background and lessons learned. These interviews will be shared on the course forum.

*(\* Alternative assignment: if you have already taken this seminar before and would prefer to have an optional assignment to replace the informational interview, please speak with the instructor.)*

For more information regarding informational interviewing, see these links:

<https://careers.unc.edu/videos/informational-interviewing-0>

<https://careers.unc.edu/students/exploring-majors-and-careers/informational-interviewing>

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. Because this course is about your career and interests, you are highly encouraged to pick an area that will be useful to you in your career.

Each student will present their slide presentation to the class during a final in-class meeting of all enrolled students. 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.

The final presentation times will be determined during the first two weeks of class. Based on class size, we may need to have 1.5 to 2 hours available for those presentations.

You can find examples of previous presentations here: <http://chip.unc.edu/seminar-presentations/> Students will have their presentations shared on the CHIP site unless they request otherwise, and we strongly encourage you to post the Slideshare version of your presentation to your LinkedIn profile to showcase your work!

**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.

List of Informatics Seminar with abstracts and videos, 2009-Present

Current and past seminar talks: <http://www.dukeinformatics.org/education/informatics-seminars/>

In the navigation menu, you can hover over Informatics Research Seminars in the navigation bar to see archives from previous years.

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

Non-required Reference  
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) | **Description** |
| Introductory Videos – Introduce yourself | 2 | Introductory video, and responses to other students’ videos |
| Attendance at required UNC-based seminars | 10 | Attending the 2 lectures at UNC in person, as well as interactive session on November 15th, and the two final presentation sections. See events in blue on schedule below. |
| Seminar write-ups | 18 | 9 lecture write-ups (2 points each) |
| Informational Interview (or alternative, see above) | 20 | Interview someone working in the field, with 2 page summary. |
| Final Presentation | 50 | In-class presentation, with slides and references |
| **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 |

The schedule for submission of assignments is as follows:

|  |  |
| --- | --- |
| **Assignment** | **Due Date** |
| **Introduction Videos**   * Introduce yourself – make a video introducing yourself * Response to introductions – respond to other student videos | Introduce Yourself – Aug. 25  Response to Introductions – Aug. 30 |
| **Informatics Research Seminars**  (See schedule on last page of syllabus)     * Attend Seminars**-** there are 11 scheduled seminars, and in-person attendance is required for all of the sessions taking place at UNC (see events in blue on schedule below) See list of all talks and their details below. * Summary- 1-2 paragraph summary of seminar, including question that arises from presentation. Due no later than 4 pm one week after seminar presentation. 2 points each. Submit via Sakai Assignments tab. | Summary: due by 4 pm one week after seminar (which is generally the time the next seminar begins) |
| **Informational Interview**     * Reach out to someone working in a role related to course topics and hold a one-hour informational interview asking them about their work, important industry trends, and topics of interest to your future professional career. Write up 2 page summary of the experience including background and lessons learned. | Due by Oct 25th |
| **Final Presentations for Health Informatics Seminar**   * Final presentation, Powerpoint slides * Reference list | *Presentations will be held on Nov. 29th and Dec. 6th. Exact times to be determined, likely either 3:30-5:00 or 4:00-5:30.*  *Sign up for presentation slot when announced to class.* |

# Grading Criteria for Final Presentation

|  |  |
| --- | --- |
| **Possible Points** | **Criteria** |
| 5 | Clear topic description |
| 10 | Highlights key observations and content from one or more seminars from this semester’s Health Informatics Research Seminar series. |
| 15 | Presentation demonstrates synthesis and evaluation of seminar presentation and scientific literature; creates new and innovative ways of approaching health informatics problems or issues. |
| 10 | Presentation well-organized, content on slides conveyed clearly and concisely with attention to correct spelling, acronyms spelled out, limited use of jargon |
| 5 | Presentation delivery is strong (poise, eye contact, articulation, pacing, volume, professionalism) |
| 5 | Submitted reference list with at least 5 relevant, evidence-based papers from the scientific literature on the topic |
| **50** | **Total Possible** |

**Extra Credit:**

Students who are dedicated to get high grade in the course and who are willing to do extra assignments can talk with the instructor. We can talk about possible ways to achieve that goal.

# **Health Informatics Seminar Series Schedule**

<http://www.dukeinformatics.org/education/informatics-seminars/>

**Fall 2017 Seminar Schedule**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Site** | **Date** | **Speaker** | **Topic** |
| 1 |  | 23-Aug |  | NO CLASS. (Complete Introduction Video) |
| 2 | Duke | 30-Aug | Dr. Susan Spratt | EHR Phenotypes |
| 3 | UNC-CH | 6-Sep | Dr. Michael Kosorok | Machine learning in Biostatistics |
| 4 | UNC-C | 13-Sep | Zbigniew W. Ras, PhD., D.Sc | Reduction of Re-admissions to Hospitals Based on Actionable Knowledge Discovery and Personalization |
| 5 | ECU | 20-Sep | Dr. David Michael | Medication Reconciliation |
| 6 | NCCU | 27-Sep | Stephanie Bryant | Innovations in Precision Medicine |
| 7 | Duke | 4-Oct | Dr. Michael Pencina | Statin Study from NHANES |
| 8 | NCCU | 11-Oct | Dr. Nia S. Mitchell | Evidence Based Data Study on Weight Loss Programs |
| 9 | UNC-C | 18-Oct | Cristina Lanzas, PhD | Antimicrobial Resistance Surveillance: Data Mining and Knowledge Discovery |
| 10 | ECU | 25-Oct | Dr. Juhee Kim & Dr. Akshat Kapoor | Weighing the odds: Problem list omissions and patient portal utility among obese patients |
| 11 | UNC-CH | 1-Nov | Polly Mitchell-Guthrie | Advanced Analytics Adoption at UNC Health Care System: A Case Study |
| 12 | Duke | 8-Nov | Dr. Andrew Wang | Development of HCM Care app |
| 13 | UNC-CH | 15-Nov |  | Interactive session. Topic to be determined by class. |
| 14 |  | 22-Nov |  | NO CLASS (Thanksgiving) |
| 15 | UNC-CH | 29-Nov |  | Final presentations - Part 1 |
| 16 | UNC-CH | 6-Dec |  | Final presentations - Part 2 |