I. Rationale:
This course covers major issues in health informatics. Representative topics may include: the management of health information; application of information and communication technologies to support health services; health informatics in the national, professional, and personal contexts; provider-patient relationship; consumer health information; personal electronic health records; privacy and confidentiality; professionals and patients education and training; e-health/mHealth; and the relationships among health literacy, health disparities, and technology.

II. Course Objectives:

Aims
Information and communication technologies are increasingly being applied to the healthcare context, with many new jobs opening up in areas such as health information management, electronic health records, patient portals, and consumer and public health informatics. This course aims to prepare students for the challenges and career opportunities provided by these recent developments.

Specific Learning Objectives:
By the end of this course, students will:

- Discuss major issues – social, cultural, political, economic, technological, historical, and ethical – associated with the management of health information.

- Describe the benefits, challenges, and potential solutions associated with the application of information and communication technologies to support health services.

- Evaluate the relative strengths and weaknesses of health informatics in different levels of professional contexts, including hospitals and other large and medium healthcare systems, and small primary care settings.

- Analyze recent major changes in the provider-patient relationship and the implications for healthcare professionals, patients, and society.

- Discuss rationales, developments, and challenges of the consumer health information movement and potential solutions to overcome those challenges.

- Explore the major ethical and technical factors associated with electronic health records, health information exchange, and the management of patient-generated electronic health records.

- Compare and contrast knowledge of related fields such as nursing informatics, medical informatics, and allied health informatics.
• Investigate informatics education and training for healthcare professionals and patients.

• Evaluate evidence as related to health informatics and implications of the findings for use by healthcare professionals.

• Develop a holistic view of the use of the Web, electronic health records, patient portals, and other information and communication technology in healthcare services.

• Investigate opportunities and challenges associated with using technology to promote the health literacy of underserved social groups and individuals and narrow health disparities.

III. Format and Procedures:
This class will be fully Web-based. Each student is expected to actively participate in and make high quality contribution to every class discussion via the course website on UT Canvas.

IV. Tentative Course Schedule: **This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

<table>
<thead>
<tr>
<th>Wk</th>
<th>Dates</th>
<th>Main Topic(s)</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>1</td>
<td>8/24-8/30</td>
<td>Introduction to health informatics</td>
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<td>2</td>
<td>8/31-9/6</td>
<td>National policies, strategies, and efforts</td>
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<td>3</td>
<td>9/7-9/13</td>
<td>Health Information Exchange</td>
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<td>4</td>
<td>9/14-9/20</td>
<td>Electronic Health Records (EHR)</td>
<td>Paper #1 outline/ references due</td>
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<td>5</td>
<td>9/21-9/27</td>
<td>Computerized prescriber order entry (CPOE) and clinical</td>
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<td>decision support systems (CDSS)</td>
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<td>6</td>
<td>9/28-10/4</td>
<td>Information copyright, fair use, network security,</td>
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<td>privacy &amp; confidentiality</td>
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<td>7</td>
<td>10/5-10/11</td>
<td>HCI – analysis/design/ evaluation tools and techniques</td>
<td>Paper #1 Due; student presentations</td>
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<tr>
<td>8</td>
<td>10/12-10/18</td>
<td>Consumer health informatics</td>
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<td>9</td>
<td>10/19-10/25</td>
<td>Public health informatics</td>
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<td>10</td>
<td>10/26-11/1</td>
<td>Evidence-based practice</td>
<td>Paper #2 outline/ references due</td>
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<td>11</td>
<td>11/2-11/8</td>
<td>Telehealth/ telemedicine</td>
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<td>12</td>
<td>11/9-11/15</td>
<td>eHealth/mHealth</td>
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<td>13</td>
<td>11/16-11/22</td>
<td>Health Informatics: opportunities, challenges, future</td>
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<td>directions</td>
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<td>14</td>
<td>11/23-11/26</td>
<td>No Class – Thanksgiving Break</td>
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<td>15</td>
<td>11/28-12/5</td>
<td>Wrap up &amp; student presentations</td>
<td>Paper #2 due; student presentations</td>
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Feedback Statement
During this course I will be asking you to give me feedback on your learning in informal as well as formal ways, including through anonymous surveys about how my teaching strategies are helping or hindering your learning. It's very important for me to know your reaction to what we're doing in class, so I encourage you to respond to these surveys, ensuring that together we can create an environment effective for teaching and learning.

V. Course Requirements:

1. Class participation policy:
   Class participation is extremely important for Web-based classes like this one. Students are expected to read all required readings each week and discuss them online. Active participation in the online discussions and high quality contributions to each class discussion are essential to successful completion of this course.

Religious Holy Days
By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss an assignment in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

2. Course Readings/Materials:
All course readings are free Web-based materials or available via the university library’s ejournal database. For the week-by-week readings list, see the course Canvas site. All course readings must be completed for the specified week.

3. Assignments, Assessment, and Evaluation

(a) Assignments: All assignments must be completed and submitted by the posted deadline. No late assignments will be accepted. Keep in mind that it is the student’s responsibility to inform the instructor of any intended absences for religious observances in advance. In the event of an unexpected incident such as a medical emergency, please submit a written explanation to the instructor immediately upon returning to class.

(b) Instructions for Research Papers: Students will choose two different topics of interest (that are within the scope of this course), and develop a paper on each topic. The topics of these papers will be selected in consultation with the instructor. Each paper should have a list of at least 10 references of direct relevance to the paper, at least half of which must be peer-reviewed journal articles. Unless there is a strong reason, students should always use the most recent references (i.e., published within the past three years, at most).

   a. For Paper #1, students should submit a list of 1-3 topics, with at least 10 references for each topic, at the start of the Week 4 class. Each topic should start with an informative and succinct title, followed by descriptions approximately half page-long, double-spaced. References should be listed after each relevant topic (no page limit
for the references section). Grading criteria for this assignment: suitability and creativity of topic and appropriateness of references.

b. The full paper #1 is due by the end of Week 7. Page limit for the full paper: approximately 5-6 double-spaced pages, excluding references. Grading criteria for this assignment: suitability and creativity of topic, quality of concepts and ideas, understanding of the relevant literature, organization of the content, overall coherence and clarity of writing, and appropriateness of references.

c. During Week 7, students should also post PowerPoint slides (or presentation materials made by equivalent software tools) to present their papers, and answer questions from the instructor and other students about their papers. Grading criteria for the presentations: quality of research, organization of the content, visual aids, and overall coherence and clarity of the oral presentation.

d. For Paper #2, the same requirements apply, with the due dates being Week 10 for the Topic/References, and Week 15 for the full paper #2 and presentations.

Important: These mini papers are designed to serve as a practical learning experience in applying and integrating the class concepts, theories, and models. As such, it is important that each mini paper makes use of the concepts, theories, models, techniques, and tools learned throughout this course, including the weekly course readings and lectures, as much as possible and whenever appropriate.

NOTE: ALL written reports for this course must be double-spaced, with 1” margins on all sides, and using 11 point Arial font. ALL written reports must also list all of the references cited, following the APA format (e.g., http://owl.english.purdue.edu/owl/resource/560/01/)

4. Use of Canvas in class

In this class I use Canvas — a Web-based course management system with password-protected access at http://canvas.utexas.edu/ — to distribute course materials, to communicate and collaborate online, and to post grades. You can find support in using Canvas at the ITS Help Desk at 475-9400, Monday through Friday, 8 a.m. to 6 p.m., so plan accordingly.

VI. Grading Procedures: Grades will be based on:

(a) Class participation (40%)
- Weekly class participation: contributing to online discussions about the assigned readings and leading discussions about self-selected readings.

(b) Research papers (60%)

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<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tr>
<td>Paper #1 outline/references (10%)</td>
<td>By the end of Week 4</td>
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<tr>
<td>Paper #1 (15%) + Presentation (5%)</td>
<td>By the end of Week 7</td>
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<tr>
<td>Paper #2 outline/references (10%)</td>
<td>By the end of Week 10</td>
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<tr>
<td>Paper #2 (15%) + Presentation (5%)</td>
<td>By the end of Week 15</td>
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VII. Academic Integrity

University of Texas Honor Code: “The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each
member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.” Students in this course must follow the University of Texas Honor Code, which prohibits cheating, plagiarizing, submitting the same written assignment for two courses without authorization, and unauthorized collaboration/collusion. Suspected academic dishonesty will be reported and handled according to University policy and procedures. For a detailed description of the University definition of academic dishonesty, visit: http://deanofstudents.utexas.edu/sjs/acadint_whatis.php. Students are responsible for applying the academic integrity standards to this course. It is essential students know the consequences of cheating, plagiarism, or any other form of academic dishonesty. For specific information on these consequences, visit: http://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/

VIII. Other University Notices and Policies

Use of E-mail for Official Correspondence to Students
All students should become familiar with the University’s official e-mail student notification policy. It is the student's responsibility to keep the University informed as to changes in his or her e-mail address. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. It is recommended that e-mail be checked daily, but at a minimum, twice per week. The complete text of this policy and instructions for updating your e-mail address are available at http://catalog.utexas.edu/general-information/appendices/appendix-m/

Documented Disability Statement
Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (SSD) at (512)-471-6259 (voice) or (512)-410-6644 (videophone). Faculty is not required to provide accommodations without an official accommodation letter from SSD.

- Please notify me as quickly as possible if the material being presented in class is not accessible (e.g., instructional videos need captioning, course packets are not readable for proper alternative text conversion, etc.).

- Contact Services for Students with Disabilities at (512)-471-6259 (voice) or (512)-410-6644 (videophone). or reference SSD’s website for more disability-related information: http://ddce.utexas.edu/disability/

Behavior Concerns Advice Line (BCAL)
If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual’s behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit http://www.utexas.edu/safety/bcal.

Emergency Evacuation Policy
Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation:
• Familiarize yourself with all exit doors of the classroom and the building. Remember that the nearest exit door may not be the one you used when you entered the building.
• If you require assistance to evacuate, inform me in writing during the first week of class.
• In the event of an evacuation, follow my instructions or those of class instructors. Do not re-enter a building unless you’re given instructions by the Austin Fire Department, the UT Austin Police Department, or the Fire Prevention Services office. See also the Nursing Building Evacuation Plan (separate file) in the course website.