1. Course description
The concept of consumer health informatics, health behavior theories, health information seeking and information retrieval, various forms of consumer health systems, and the design and evaluation of such systems

2. Course objectives
Upon successful completion of this course, a student will be able to:

1. Understand major theoretical perspectives to health behavior
2. Understand several widely-used health information seeking models
3. Examine health information seeking and information retrieval in the broader context of health behavior
4. Design effective consumer-oriented interventions for various purposes, including patient education, self-management, behavior change, and decision-making
5. Critically evaluate web-based consumer health information systems and applications
6. Analyze the social and ethical issues related to computerized healthcare information delivery.

3. Texts
**Required readings** will be available in Canvas: [http://canvas.utexas.edu](http://canvas.utexas.edu)

**Recommended texts:**


4. Policies

4.1 Policies concerning assignments
- Assignments must be submitted by midnight (11:59PM) on the due date.
- In fairness to students who turn in assignments on time, all late papers will be penalized by lowering the earned grade one grade level (e.g., from A- to B+; from B to B-) for each day that the assignment is late.
- No assignment submitted more than one week after the due date will be accepted.
These penalties will not apply to students who know in advance that they will be submitting an assignment late, and let me know in advance. “In advance” means up until 24 hours before the class session in which the assignment is due.

### 4.2 Policies on class attendance and participation

- Reading assignments must be done before class so that you can meaningfully participate in class discussions.
- You must participate in class discussions. In-class discussions and activities play an important role in this class. Extensive participation in class discussion will be an essential element of your learning success on the subject of understanding and serving users. Active involvement in learning increases what is remembered, how well it is assimilated, and how the learning is used in new situations. Class participation will be graded as part of your final grade.
- Attending each class is highly recommended. If you know in advance that you must miss a class, let me know in advance (up until 24 hours before the class session).
- If you miss a class session, unexpectedly, get in contact with me or the TA ASAP.

### 4.3 University policies

#### 4.3.1 Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code:

“As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.”

This means that work you produce on assignments is all your own work. Always cite your sources. If you use words or ideas that are not your own (or that you have used in previous class), you must make that clear otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course.

You are responsible for understanding UT’s Academic Honesty Policy which can be found at the following web address: [http://deanofstudents.utexas.edu/sjs/acint_student.php](http://deanofstudents.utexas.edu/sjs/acint_student.php)

#### 4.3.2 Student Accommodations

Students with a documented disability may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259 (voice) or 1-866-329-3986 (video phone). [http://ddce.utexas.edu/disability/about/](http://ddce.utexas.edu/disability/about/)

- Please request a meeting as soon as possible to discuss any accommodations
- Please notify the instructor as soon as possible if the material being presented in class is not accessible
- Please notify the instructor if any of the physical space is difficult for you

#### 4.3.3 Religious Holy Days

By UT Austin policy, you must notify the instructor of your pending absence at least fourteen days prior to the date of observance of a religious holy day to receive an accommodation.

#### 4.3.4 Drop Policy

If you want to drop a class after the 12th class day, you need to execute a Q drop before the Q-drop deadline, typically near the middle of the semester. Under Texas law, you are only allowed six Q drops
5. Grading

5.1 Grading scale

In the School of Information, the following guidelines are used in grading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>Excellent. High degree of mastery of the course material.</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
<td>Very good.</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
<td>More than satisfactory.</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Satisfactory. Work consistent with academic expectations of graduate students.</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
<td>Less than satisfactory.</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
<td>Unsatisfactory. May indicate the instructor's reservations about the student's ability to meet the iSchool’s academic requirements.</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Unsatisfactory. Indicates the instructor's reservations about the student's ability to meet the iSchool’s academic requirements.</td>
</tr>
<tr>
<td>C-</td>
<td>1.67</td>
<td>Unsatisfactory. Indicates the instructor's strong reservations about the student's ability to meet the iSchool’s academic requirements. Any course with a grade lower than C cannot be counted toward a student’s degree.</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>Unacceptable. Indicates the instructor's very strong reservations about the student's ability to meet the iSchool’s academic requirements and to earn a graduate degree. Any course with a grade lower than C cannot be counted toward a student’s degree.</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failing.</td>
</tr>
</tbody>
</table>

Semester grades will be computed as follows:

A = 94-100; A- = 90-93
B+ = 87-89; B = 84-86; B- = 80-83
C+ = 77-79; C = 74-76; C- = 70-73
D+ = 67-69; D = 60-66
F = anything below 59
5.2 Grading rubric for presentations in the class

For all your presentations in this class (topic presentations and final project presentations), you are encouraged to use Powerpoint or some other presentation program (such as Open Office or Lotus Symphony). The grading rubric for the presentation is listed below (Note: This rubric was developed by Information Technology Evaluation Services, NC Department of Public Instruction. However, it was slightly modified for our purposes.)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience cannot understand presentation because there is no sequence of information</td>
<td>Audience has difficulty following presentation because presenter jumps around</td>
<td>Presenter presents information in logical sequence which audience can follow</td>
<td>Presenter presents information in logical, interesting sequence which audience can follow</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject Knowledge</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenter does not have grasp of information; presenter cannot answer questions about subject</td>
<td>Presenter is uncomfortable with information and is able to answer only rudimentary questions</td>
<td>Presenter is at ease with expected answers to all questions, but fails to elaborate</td>
<td>Presenter demonstrates full knowledge (more than required) by answering all class questions with explanations and elaboration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenter uses superfluous graphics or no graphics</td>
<td>Presenter occasionally uses graphics that rarely support text and presentation</td>
<td>Presenter’s graphics relate to text and presentation</td>
<td>Presenter’s graphics explain and reinforce screen text and presentation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spelling &amp; Grammar</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenter’s presentation has more than one misspelling and more than one grammatical error</td>
<td>Presentation has exactly one misspelling and/or exactly one grammatical error, which a spell- or grammar checker would catch</td>
<td>Presentation has exactly one misspelling and exactly one grammatical error, which a spell- or grammar checker would not catch</td>
<td>Presentation has no misspellings or grammatical errors</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye Contact</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenter reads all of report with no eye contact</td>
<td>Presenter occasionally makes eye contact, but still reads most of report</td>
<td>Presenter maintains eye contact most of the time but frequently returns to notes</td>
<td>Presenter maintains eye contact with audience, seldom returning to notes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elocution</th>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenter mumbles, incorrectly pronounces terms, and speaks too quietly for audience in the back of room to hear</td>
<td>Presenter’s voice is low. Presenter incorrectly pronounces terms. Audience members have difficulty hearing presentation.</td>
<td>Presenter’s voice is clear. Presenter pronounces most words correctly. Most audience members can hear presentation.</td>
<td>Presenter uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.</td>
<td></td>
</tr>
</tbody>
</table>
6. Assignments

6.1 Overview

This is an overview of the assignments for this course:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due date</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending class</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Participating in class discussions</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Show and tell</td>
<td>Various dates</td>
<td>15</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Project proposal</td>
<td>Oct 16</td>
<td>5</td>
</tr>
<tr>
<td>1st check of project progress</td>
<td>Nov 13</td>
<td>5</td>
</tr>
<tr>
<td>2nd check of project progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final report</td>
<td>Dec 4</td>
<td>35</td>
</tr>
<tr>
<td>Final presentation</td>
<td>Dec 4</td>
<td>15</td>
</tr>
</tbody>
</table>

6.2 Requirements for each assignment

1. **Attending class**
   Students are required to physically attend each class and arrive at each class promptly. Class attendance will be graded as part of your final grade. If you know in advance that you must miss a class, let me know in advance (up until 24 hours before the class session). If you miss a class session, unexpectedly, get in contact with me ASAP.

2. **Participating in class discussions**
   Before each class, students are required to prepare one question, either about the readings or inspired by the readings, and post it to Canvas (http://canvas.utexas.edu) by noon (12:00PM) on each Tuesday. I will select among the posted questions for class discussion. You should also feel free to take advantage of the communication and discussion functions provided by Canvas to initiate discussion topics, express your opinions on certain topics, or share interesting readings.

3. **Show and tell**
   Each student will make one show-and-tell over the semester. In the show-and-tell, you will select one consumer health system or application and present it to the class. The system that you present could be, but not limited to, the following categories:
   - Consumer health information retrieval systems
   - Patient information and education systems
   - Social media and online communities
   - Personal health records or patient portals
   - Serious games
   - Mobile apps for disease management
   - Quantified self apps
   - Others… (discuss with the instructor)

   The presentation could include, but not limited to, the following information:
   - What does the system/app do?
   - Who created this system or application?
   - How does this system/app work? (a demo)
   - Are there similar systems?
✓ How do you think about the system (in comparison to similar systems/spps when applicable)?

The instructor is available for discussion about the show-and-tell. Each show-and-tell lasts about 10-15 minutes, followed by a Q&A session. This assignment will be evaluated based on the grading rubric for presentations (section 5.2).

4. Final project
The final project is a design project. Students will work in groups. Each group should not exceed four members. The rough steps for the project are:

- Propose a system that you are going to design (e.g., an iPad-based app on diabetes management for young adults, a web-based information and education system for breast cancer patients, an educational tool that helps educate patients on evaluating the quality of online health information);
- Perform a competitive analysis, i.e., conduct a review of existing similar systems (define your own rubrics in ways that would support your design decisions);
- Select one or multiple relevant health behavior or other theories and describe how the theories can inform the design;
- Create a design proposal outlining: goals that the system intends to achieve and major components of the system (in a table format listing system functions and theoretical foundations, if any, to support the design);
- Create a medium-fidelity mockup of the system (the mock-ups should include major components of the system (the top level) outlined in the proposal. When there are multiple major components, create one mock-up for each major component to represent major functionalities included in the component (the second level). No mock-ups are required for design at the third-level);
- Present your project. The presentation should be about 20 minutes long, with 5 additional minutes for Q&A. The grading criteria are listed in section 5.2.

Please discuss with the instructor if you want to choose alternative approaches (e.g., a literature review) to fulfill this assignment. The amount of work that you proposed should be equivalent to the work required by the design project outlined above.
7. Schedule & Readings

7.1 Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sep 4</td>
<td>Introduction; What is CHI?</td>
<td></td>
</tr>
<tr>
<td>2 Sep 11</td>
<td>Health behavior at the individual level</td>
<td></td>
</tr>
<tr>
<td>3 Sep 18</td>
<td>Health behavior at the interpersonal level</td>
<td>Project proposal</td>
</tr>
<tr>
<td>4 Sep 25</td>
<td>Consumer health information seeking: Information sources</td>
<td></td>
</tr>
<tr>
<td>5 Oct 2</td>
<td>Consumer health information seeking: Information needs</td>
<td></td>
</tr>
<tr>
<td>6 Oct 9</td>
<td>Health literacy and eHealth literacy</td>
<td></td>
</tr>
<tr>
<td>7 Oct 16</td>
<td>Consumer health information retrieval and information seeking behavior</td>
<td>First check of project progress</td>
</tr>
<tr>
<td>8 Oct 23</td>
<td>Design consumer health systems: Theory-guided approach</td>
<td></td>
</tr>
<tr>
<td>9 Oct 30</td>
<td>Design consumer health systems: User-centered approach</td>
<td></td>
</tr>
<tr>
<td>10 Nov 6</td>
<td>Personal health records &amp; patient portals</td>
<td></td>
</tr>
<tr>
<td>11 Nov 13</td>
<td><strong>Instructor attending ASIST conference, no class</strong></td>
<td>Second check of project progress</td>
</tr>
<tr>
<td>12 Nov 20</td>
<td>Games for health</td>
<td></td>
</tr>
<tr>
<td>13 Nov 27</td>
<td>mHealth</td>
<td></td>
</tr>
<tr>
<td>14 Dec 4</td>
<td>Project presentation</td>
<td>Final report Project presentation</td>
</tr>
</tbody>
</table>

7.2 Readings

Sep 4  Introduction; What is CHI


**Sep 11  Health behavior at the individual level**


**Sep 18  Health behavior at the interpersonal level**


**Sep 25  Consumer health information seeking: Information sources**

Review the following websites:
- National Network of Libraries of Medicine, NLM: [http://nnlm.gov](http://nnlm.gov); Consumer health information resources (multiple languages) [http://nnlm.gov/outreach/consumer/multi.html](http://nnlm.gov/outreach/consumer/multi.html)
- NIH Senior: [http://nihseniorhealth.gov/](http://nihseniorhealth.gov/)


Oct 2 Consumer health information seeking: Health information needs


Oct 9 Consumer health information retrieval and information seeking behavior


Oct 16  **Health literacy and eHealth literacy**


Oct 23  **Design consumer health systems: Theory-guided approach**


### Oct 30

**Design consumer health systems: User-centered approach**


### Nov 6

**Personal health records & Patient portals**


### Nov 13

**Instructor attending ASIST conference, no class**

### Nov 20

**Games for health**

Check out the following sites:
1. [https://medlineplus.gov/games.html](https://medlineplus.gov/games.html)
2. [https://medicine.yale.edu/intmed/genmed/games/](https://medicine.yale.edu/intmed/genmed/games/)
4. [https://www.webmd.com/a-to-z-guides/games/default.htm](https://www.webmd.com/a-to-z-guides/games/default.htm)

Baranowski, T., Blumberg, F., Buday, R., DeSmet, A., Fiellin, L. E., Green, C. S., … Young, K. (2016). Games for Health for Children—Current Status and Needed Research. *Games For Health Journal*, 5(1), 1–12. [https://doi.org/10.1089/g4h.2015.0026](https://doi.org/10.1089/g4h.2015.0026)


Nov 27  mHealth


Recommended reading:

Dec 4  Final project presentation

8. University Resources for Students

The university has numerous resources for students to provide assistance and support for your learning, use these to help you succeed in your classes.

The Sanger Learning Center
Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center’s classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit http://www.utexas.edu/ugs/slc or call 512-471-3614 (JES A332).

The University Writing Center
The University Writing Center offers free, individualized, expert help with writing for any UT student, by appointment or on a drop-in basis. Consultants help students develop strategies to improve their writing. The assistance we provide is intended to foster students’ resourcefulness and self-reliance. http://uwc.utexas.edu/

Counseling and Mental Health Center
The Counseling and Mental Health Center (CMHC) provides counseling, psychiatric, consultation, and prevention services that facilitate students’ academic and life goals and enhance their personal growth and well-being. http://cmhc.utexas.edu/
**Student Emergency Services**  
http://deanofstudents.utexas.edu/emergency/

**ITS**  
Need help with technology?  
http://www.utexas.edu/its/

**Libraries**  
Need help searching for information?  
http://www.lib.utexas.edu/

**Canvas**  
Canvas help is available 24/7 at  
https://utexas.instructure.com/courses/633028/pages/student-tutorials

**Important Safety Information**

**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  

**Evacuation Information**

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767,  
http://www.utexas.edu/safety/

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when an alarm or alert is activated. Alarm activation or announcement requires exiting and assembling outside, unless told otherwise by an official representative.
- If campus is closed, or if the building is locked down, class is automatically cancelled; please stay safe.
- Familiarize yourself with all exit doors. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Link to information regarding emergency evacuation routes and emergency procedures can be found at:  
www.utexas.edu/emergency