UTHealth | The University of Texas Health Science Center at Houston | School of Biomedical Informatics

HI5315 Quality and Outcome Improvement in Health Care

Fall 2015

3 Semester Credit hours

Course Description

This graduate level introductory course provides an overview to healthcare quality from the view of information science and the discipline of informatics. It takes a patient centered approach that covers the complexities of quality and the scientific basis for understanding the measurement and improvement of quality, including exposure to multiple measures from a variety of organizations and measure comparison sites such as Medicare Compare. It provides the learner with a framework for key theories and concepts, and models of quality improvement. Students will be introduced to the health information technology safety issues, including tools for operationalizing HIT safety. Learners will be introduced to data quality, the challenges of data from devices, e-quality measures, as well as experience the challenge of calculating quality measures with data from the EHR. The merging of quality outcomes with evolving reimbursement paradigms and models will be examined.

Learning Objectives

Upon successfully completing this course, students will be able to:

- Master the fundamentals of health care quality management
- Analyze the measurement, assessment and improvement of health care quality
- Evaluate health care quality e-measures for electronic reporting
- Determine the influence of health information technology on health care quality
- Outline threats to patient safety from HIT
- Identify options for remediating threats to patient safety from HIT
- Produce a quality measure from a nationally available dataset

Prerequisite/Co-requisite

Basic statistics knowledge is recommended for this course.

To successfully complete this course, you need to have your personal computer and have access to the Internet. You will need to meet the school's requirements for computer access.

Textbook

Required Readings

Spath, P. (2013). *Introduction to healthcare quality management.* Chicago: Health Administration Press.
ISBN-10: 1567935931 | ISBN-13: 978-1567935936 | Edition: 2nd

Sittig, D. F., & Ash, J. (2011). *Clinical information systems: Overcoming adverse consequences.* Sudbury, Mass: Jones and Bartlett.
ISBN-10: 0763757640 | ISBN-13: 978-0763757649

Beside the textbooks listed above, you will also be asked to read journal articles throughout the semester.

Instructor Information

Susan Fenton, Ph.D., RHIA, FAHIMA

Assistant Professor and Associate Dean for Academic Affairs UCT 690
E-mail: Susan.H.Fenton@uth.tmc.edu
Office phone: 713-500-3591

Office Hours: Wednesday, from 7 – 8 pm in GoToMeeting or by appointment set up via email

Graduate Teaching Assistant

Regina Wysocki, BSN, RN

Master of Science Candidate in Applied Healthcare Informatics
E-mail: Mary.R.Wysocki@uth.tmc.edu
Cell: 281-468-1601 (Can call and/or text)

Office Hours: by appointment via email

Method of Instruction

This online course is broken down into weekly/topical instructional units. Every week, a new instructional unit will be presented, with each unit containing a combination of the following elements:

- Lecture slides
- Reading Assignment - Book Chapters, Web content, Journal Articles
- Weekly Discussion
- Weekly Quiz or Project Assignment

The instructional materials and activities for this course reside in Canvas, a Learning Management System (LMS).

The activities for each week should take you about 6 to 9 hours depending on your study skills and previous experience with graduate education, technology, on-line learning and our learning management system, Moodle. Dedicate at least 3 hours each week on the current assignment and 3 to 6 hours of work outside of the course each week.

It is expected that you will access the course on a regular basis. As the course progresses you will get a better sense for how frequently you need to access the course site to complete and submit the assignments and meet the course objectives. Moodle monitors your access and activities in the course and the course instructor may contact you if you do not access and make reasonable progress in the course over a period of time.

Successful course completion requires having access to the current course resources and materials, reading the course materials, actively participating in learning activities such as discussions, group projects and completing all assignments, quizzes and exams. Completing all the assignments is required in order to receive a course grade.

The instructor will respond to student emails, monitor student progress and answer questions posted on the discussion forums, and send out weekly announcements or emails to the class.

It is your responsibility to check your UTH e-mail account regularly (at least weekly) to make sure you receive announcements and information sent out by your instructor and TA.

Instructions and expectations (rubrics) are provided for assignments and grading throughout the course. A rubric is an explicit set of criteria used for assessing a particular type of work or performance and usually includes levels of potential achievement for each criterion. A rubric may be used to indicate what should be included on an assignment and the elements that will be graded. It is critical for your success in this course to align your effort with the criteria in the rubrics when working on the assignments.

Grading

The following evaluation criterion will be used for determining your grade for this course. Letter grades will be assigned based on the percentage of total points received (e.g., 90-100% =A, 80-89%=B, 70-79%=C, <60=F, and I (Incomplete)). An Incomplete is given only when situations outside of the student's control occur. School policy mandates that an Incomplete must be completed by the end of the following semester. An Incomplete that is not completed by the end of the next semester will turn into an F automatically.
Your final class grade will largely be based on the results of all the assignments and activities (e.g., online discussions, quizzes, and completion of course project) that are designed to reflect your understanding of the course content. Finishing all the assigned readings, assignments, and activities **on time** will help you to achieve the objectives for this course. Late submissions will incur penalties and affect your final grade.

Requirements	**Percentage of Total Points**
Weekly Quizzes	10
Weekly Discussion	10
Project Assignments	40
Mid-term Exam	15
Final Exam	20
Poster	5
Total	**100%**

Note: Poster day (symposium) will be held December 14, 2015 at 4:00PM.

Student Feedback / Evaluation of Instruction

At the end of the semester, you will be asked to fill out an online "Course and Instructor Evaluation" survey.

Instructors do not receive the aggregated results until all grading is done and course grades are submitted.

Instructors do not have access to the identity of the survey participants when they view the survey results.

Please take time to finish the evaluation survey since it is helpful to evaluate the instruction and provide for revisions of future course offerings.

Your feedback is encouraged throughout the course and is always welcomed.

Technical Requirements and Support

This course requires the use of GoToMeeting, as well as other specified tools, in addition to the use of the online resources provided in Canvas, our learning management system.

Please make sure that your computer meets the minimum hardware and software requirements provided at this link. Additional instructions may be provided in the course for accessing other technologies if needed.

Students must have the latest version of their operating system installed including latest security updates and service packs. SBMI recommends installing and using the following anti spyware, malware and virus control software:

- For real time protection:
  - Microsoft Security Essentials http://www.microsoft.com/security/pc-security/microsoft-security-essentials.aspx
  - BitDefender Antivirus Free Edition http://www.bitdefender.com/solutions/free.html
  - AVG http://free.avg.com/
- Other malware removal tools:
  - Malwarebytes Anti-Malware https://www.malwarebytes.org/free/
  - Panda Cloud Cleaner http://pandacloudcleaner.pandasecurity.com/

Students are required to have access to the following for accessing course materials and to complete course activities:

- Stable high-speed internet

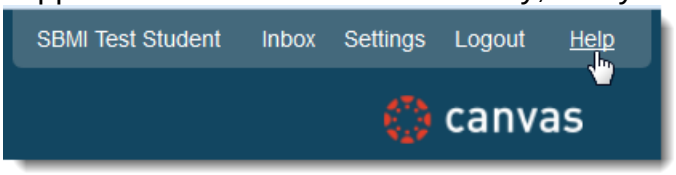
- Personal computer

This course may also require:

- Webcam for proctoring of online quizzes and exams
- Headsets with microphones for voice chatting

Troubleshooting procedures for educational technologies:

- In case of technical difficulties with proctored quizzes and exams, follow the troubleshooting procedures provided to you in the course and inform the instructor and the TA.
- For Canvas related questions, use the Help button located in the upper right corner in Canvas to email, chat or call for help. Canvas provides dedicated support to UTH users 24 hours a day, 7 days a week.



- You can direct all other technology related questions to the Distance Education Team (de@uth.tmc.edu). Currently, Distance Education Team is able to provide technical support only during business hours US Central Standard Time. Requests submitted after 5pm CST may take until the next business day to resolve. Please plan accordingly for time critical activities such as quizzes, exams, and submission dates for assignments.

In the online learning realm, trying to do things last minute is a sure way to fail and miss deadlines. It is your responsibility to allocate enough time to complete online course activities on time.

Policies

Excused Absence on Holy Days

Students who wish to observe a religious holy day that interferes with classes, examinations or completion of assignments, must inform the instructor of each class to be missed and/or of the planned absence(s) not later than the fifteenth day of the semester. The notification must be in writing and may either be delivered by the student personally to each instructor, with receipt of the notification acknowledged and dated by each instructor, or mailed by certified mail, return receipt requested, to each instructor. The full policy can be found at:
http://www.uth.edu/hoop/policy.htm?id=1448072

Academic Honesty

Academic honesty is the cornerstone of the academic integrity of a university. It is the foundation upon which the student builds personal integrity and establishes a standard of personal behavior. Because honesty and integrity are such important factors, you should be aware that failure to perform within the bounds of these ethical standards is sufficient grounds to receive a grade of "F" in this course and be recommended for suspension from the SBMI.

You should submit only your own work unless group work is indicated in your assignment. To demonstrate academic honesty, you should always indicate the use of works other than your own. Plagiarism is prohibited. Remember that most instances of plagiarism can be avoided by simply citing the source for the material that is used and thus indicating that it is not your original material. Plagiarism may include

- words or ideas taken from someone else without acknowledgment
- giving incorrect information about the source
- changing the sequence or structure but using ideas without citation
- not including material in quotes if directly taken from someone else's material and/or copying amounts of other's material and using it in violation of fair use copyright laws

With the advent of the Web and access to materials, the need to guard against using other's material without acknowledgment is especially important. So, when in doubt, cite. Prevention is the best deterrent and thus avoids the academic consequences that may follow.

Per the Exam and Written Paper Monitoring Policy, your submitted work may be subject to evaluation from Turnitin for plagiarism and some courses may require the use of Proctorio, an online proctoring software that will monitor and record you when you take online quizzes and exams.

Refer to the Student handbook Student Conduct and Discipline concerning plagiarism at https://sbmi.uth.edu/current-students/student- handbook/unacceptable-conduct.htm. More information regarding plagiarism and unacceptable conduct may be found at: HOOP Student Conduct and Discipline and http://www.uth.edu/hoop/186-appendix-a.htm. If you have questions or need additional information please let your instructor(s) know.

Copyright Policy

Information on copyright policy issues may be found at: HOOP Classroom and Research use of Copyrighted Material.

Intellectual Property

Information on intellectual property issues may be found at: HOOP Intellectual Property.

All materials presented in a course in Canvas are copyright protected unless otherwise noted.

Course Accommodation

Course accommodations are made in response to individual requests for accommodation. If you need accommodation please let your instructor(s) know. Information on disability issues may be found at: HOOP Disability Accommodation.

If you believe you have a disability requiring an accommodation, please contact Dr. Susan Fenton, Associate Dean for Academic Affairs at (713) 500-3591 or by email at Susan.H.Fenton@uth.tmc.edu.

For additional information, contact Renee Williams, Equal Opportunity Admin at (713) 500-3416 , or by email at Renee.Williams@uth.tmc.edu.