HLTH 225 – Healthcare Technology Planning and Management

Fall 2019

Course description
The course provides students with a basic understanding of the principles of healthcare technology planning and management - assessment, budgeting, acquisition, deployment, education/training, patient safety, maintenance, and replacement/disposal. Planning and management will focus on medical devices, clinical information systems, and converged systems incorporating medical devices, networks and telecommunications.

Learning Objectives

- To give students a basic understanding of the guiding principles of healthcare technology planning and management
- Provide a methodology for improving the quality of technology through effective planning, budgeting, acquisition, deployment, life cycle support, monitoring and management
- Help students better communicate with technical staff, clinicians, regulators, administrators, and technology vendors.
- Develop the student's interest and prepare them for further study and more advanced application of the principles.

Methods

The course will utilize web-based content including text, photos, diagrams, flow charts, figures, video and audio links to other websites, and other web attributes to deliver content to students.

Supplemental Text (not required):

**Student Evaluation and Grading**

1. **Five Quizzes - each 4 points**

   Multiple choice, true/false, matching, short answer and essay format.

2. **Two Exams - each 15 points**

   Exams covering the first and second half of the course. Questions are in the same format as the quizzes.

3. **Three Reports - each 10 points**

   Assignments will include reports on contemporary issues and case studies in healthcare technology and its management. Research, problem solving, insight, justification of statements, and quality of the report will all be part of the evaluation process. (see Report Guidelines below for additional information).

4. **Five Discussion Questions - each 4 points**

   Discussion questions relevant to the current topic will be presented. Students will provide an answer to the question according to the requirements and also must respond with a constructive response to another student's answer.
Discussion guidelines

Role of discussion in meeting learning objectives

- Improve the students deeper understanding of course materials by facilitating the need to understand content by drawing insight from it
- Stimulating a broad spectrum of learners to share their experiences and knowledge with others
- Allow additional content to be understood through discussion topics and related research

Discussion expectations

You are expected to answer the discussion board question with justification from the readings and at least one external reference. The answers should be at least 125 words. After answering the question, the student will then respond to another students answer - agree or disagree and why, something to add, and other constructive input. You can’t receive full credit unless you answer the question and respond to another student. NOTE: Generally, each question should be answered two days before assignment due date so that other students can respond to your question.

The discussion groups are an opportunity for you to express yourself related to topics, add a human factor to the course - show a living being on the end of the wire, and to derive a deeper understanding of content, controversy, and the value of networking with peers. Discussion groups bring life to the course!

Some guidelines

- Show respect for others and their thoughts, ideas and opinions
- Read the course content materials prior to responding. A suggestion is to prepare your discussion posts in a separate document (offline in Word or other word processor) then cut and paste to the Discussion email.
- Meet the time and date requirements of the discussion post deadlines. This gives you the opportunity to receive full credit for the question and adds greatly to the value and continuity of the posts
- Please use references, links or other sources where appropriate to back up your statements or to provide information of general class interest.

Discussion will be 20% of your grade. The grading will be based on the quality of the answer and response to another student, following guidelines above and completing the assignment on time. Responding to more than one students answer is encourages. Quality factors include value added to the course, enthusiasm, and understanding of the materials
Report Guidelines

The grading for this course includes three reports which are 10 points each. Each report is five (5) pages plus title page and bibliography unless otherwise stated in the specific report assignment.

The main body of the report should be double spaced text using 12 sized font with MS Word default margins.

The report should be sent in MS Word or Adobe PDF format.

The sections of the report should include:
   1. Title page with report title, student's name, course designation, and date
   2. (Main body of the paper)
   3. Bibliography (at least three references from outside the course content)

Criteria for grading will be:

1. Organization
2. Presentation
3. Creativity and originality
4. Quality and accuracy
5. Stating and justifying your points/arguments
6. Format, grammar, spelling, etc

The report should be attached to an email to the instructor. toby.clark@uvm.edu
HLTH 225 topics

Healthcare technology planning & management overview
Medical devices and systems
Healthcare Information Technology
Convergence of Medical Devices and Information Technology
Technology planning and policy
New Technology Assessment
Technology Replacement Planning
Net Present Value Analysis
Technology Acquisition and Deployment
Compliance with Regulations and Standards
Patient safety
Healthcare Technology Training
Health Technology Maintenance Management
Computerized Medical Equipment Management Systems
Clinical engineering
Global Health Technology