HOSP815 - E-SERVICE IN HEALTHCARE
(3 CREDITS)

SYLLABUS

COURSE DESCRIPTION:

The rapid pace of technological change as it relates to connectivity and communications is having a significant impact on healthcare service delivery. Due to enhanced mobility and the proliferation of remote service solutions, patient expectations have changed/increased to a level that healthcare providers cannot ignore. How can the healthcare industry adapt to this paradigmatic shift and yet provide the high level of assurance expected of it? By taking this course, students will be able to evaluate and articulate e-service solutions in the healthcare industry. Concepts related to technology and e-services will be applied to a healthcare context using academic articles, industry reports and case-studies.

SPECIFIC COURSE OBJECTIVES

At the end of this course, students will be able to

1. Apply e-service principles in a healthcare setting, evaluate opportunities and suggest steps to improve e-service initiatives.
2. Articulate an integrated stakeholder approach for an e-service solution in a healthcare setting.
3. Distinguish between the technological platforms widely being used in e-service delivery in healthcare.
4. Evaluate the potential of emerging remote monitoring, telemedicine and mobile health (mHealth) technologies in healthcare delivery.
5. Evaluate patient perceptions of e-service quality of e-health initiatives.
6. Articulate how technology is reshaping the emerging patient-provider dynamic.
7. Develop organizational initiatives in patient empowerment and physician education towards effective e-service delivery.

NATURE OF INSTRUCTION

The course comprises seven modules that have been categorized based on theory and application as it relates to e-services and the healthcare domain. Each module will contain

1. Micro-lectures of sub-topics by the instructor
2. Links to videos and articles that address the latest research, practice or prevailing thought pertinent to the sub-topics of each micro-module.

COURSE MATERIALS

The class will use a set of articles and cases that are customized, which students can access using permalinks placed on the Canvas Website related to each Module. While some can be accessed by
logging into the UD library for free, others from Harvard Business Publishing will be on a pay to view and download basis.

**Recommended Readings:**

The Patient Will See You: The Future of Medicine is in Your Hands, by Eric Topol  
https://www.amazon.com/Patient-Will-See-You-Now/dp/0465054749

**Supplemental Materials:** PowerPoint slides with and without audio along with notes pages (in PDF format) will be made available on the Canvas. These slides contain content from the readings and should be used to prepare for exams. The Canvas site will also contain a collection of videos and supplemental readings categorized based on specific topics.

**COURSE EVALUATION**

<table>
<thead>
<tr>
<th>Grading Parameter</th>
<th>Points</th>
<th>% of Overall Grade</th>
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<tbody>
<tr>
<td>Introduce Yourself and Confirmation of Start Here Completion</td>
<td>10</td>
<td>2%</td>
</tr>
<tr>
<td>Module Quizzes (20*7)</td>
<td>140</td>
<td>28%</td>
</tr>
<tr>
<td>Individual Assignments (25*6)</td>
<td>150</td>
<td>30%</td>
</tr>
<tr>
<td>PinUp Board Contribution and Discussion (20*7)</td>
<td>140</td>
<td>28%</td>
</tr>
<tr>
<td>End-of-Semester Final Learning Reflection (A Minimum 80% Required Here to Pass Course)</td>
<td>60</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
<td><strong>100%</strong></td>
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*Para Professor Nominations (15 Bonus Points)* – Three students can earn this nomination based on a poll of all students which evaluates contributed to an extent that everybody believed that their understanding of the content improved their understanding of course concepts.

**Grading Scale:** 94-100 → A; 90-93 → A-; 86-89 → B+; 83-85 → B; 80-82 → B-; 76-79 → C+; 73-75 → C; 70-72 → C-; Below 70 → F
Module Level Objectives

Module 1: Services, Technology & Healthcare
1. Identify how technology and services interconnect at the organizational level using the services marketing pyramid.
2. Explain the characteristics of e-services and how they manifest in healthcare.
3. Explain how the effects of information technology are reshaping healthcare service delivery.

Module 2: Technology Adoption in Healthcare
4. Describe the technology adoption process and concept of technology readiness as it relates to healthcare.
5. Identify the drivers and barriers of IT adoption towards the delivery of E-Health

Module 3: Health Service Quality & Technology
6. Explain the concepts underlying service quality and relate it to healthcare.
7. Describe how technology impacts healthcare service delivery and quality
8. Evaluate patient experience quality in e-health

Module 4: Understanding Patient Expectations in E-Health
9. Listening to patients and the marketplace
10. Developing relationships with patients

Module 5: Patient Centered Design in E-services in Healthcare
Patient-centered innovation in e-health
Developing soft and hard measures of delivery in e-health
E-health, e-service, physical and virtual servicescapes

Module 6: Delivering E-Services & Managing Patient Expectations in E-Health
Aligning human resource practices to meet the challenges of e-service in healthcare
Highlight the importance of patient knowledge, involvement and participation in e-service of healthcare.
Ensure that technological platforms are effectively integrated and smooth for delivery
Effectively manage patient expectations.

Module 7: What the Future Holds
Match realities on the ground with what is being propounded in the literature.
Describe future trends in healthcare determined by technological change
Illustrate how future trends may shape e-health from a service standpoint
Highlight implications for e-service quality for the future.
**Online Quizzes:** Each Module has a Quiz for 20 points that covers the contents of the module as specified in the chapters. Quizzes are self-administered and are for developing a discernible understanding of the concepts covered. They typically comprise Multiple Choice and/or True/False Questions. Students should use the Video Micro Lectures and the accompanying PowerPoints provided as handouts to guide themselves for the course for all practical purposes. Each quiz is timed for 20 minutes. Please take them under controlled circumstances of robust Internet connectivity. It is not possible to re-administer quiz once it has been taken.

**Case Studies/Case Exercises:** There are 6 individual case studies/exercises worth 25 points each with each having specific instructions. A case study comprises focuses on one or many issues in one organization in detail as opposed to a case exercise, which focuses on an issue in brief in more than one organization. The analytical approaches are largely similar with the broad exception that case exercises require a dominant comparative approach, and case studies, a dominant comprehensive approach. The course schedule under each module outlines the name and the type (case study or case exercise) of assignment.

<table>
<thead>
<tr>
<th>Criteria (All criteria assessed for 25% Each)</th>
<th>Level of Performance</th>
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<tbody>
<tr>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Quartile</td>
</tr>
<tr>
<td><strong>Problem/Issue/s Identification / Problems</strong></td>
<td>Identifies &amp; understands the main issue/s in the case study</td>
</tr>
<tr>
<td><strong>Analysis of Issue/s/Problems</strong></td>
<td>Insightful and thorough analysis of all the issue/s</td>
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<tr>
<td><strong>Comments or suggestions for effective solutions/strategic initiatives.</strong></td>
<td>Well documented, reasoned and pedagogically appropriate comments on solutions, or proposals for solutions, to issue/s in the case study</td>
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<tr>
<td><strong>Additional research</strong></td>
<td>Excellent research into the issue/s with clearly documented links to class (and/or outside) readings</td>
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**PinUP Board Contribution and Discussions:** This is like a discussion forum set up to induce student participation and collaborative engagement sans good food and drink. To earn points, students can add web links and resources that relate to the module concepts being covered for that specific week. **You must add your own link on a new thread to qualify for points.** Think of it like a “Potluck”, which relies on individual contributions to an event or a crowdsourcing platform that uses the crowd to generate contextual knowledge, while also stimulating a discussion. Para Professors: Students should
send five names of students in no particular order that they thought added most to the discussion boards and improved their understanding of course content. These names should be determined by the following grading guidelines and not just personal preferences. Your objectivity and judgment is on the line here. The three most acclaimed names will earn a bonus of 15 points for the course. They will be given the titles of “Para Professors” because of their inputs towards enhancing the content of the course. A rubric to grade the individual contributions at the weekly potlucks and determine the top five are below. Note that I will use the same grading scheme to evaluate contributions.

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<tbody>
<tr>
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<td>0</td>
</tr>
<tr>
<td><strong>Weekly PinUp Board Contribution</strong></td>
<td>Did not contribute an article/link on new thread</td>
</tr>
<tr>
<td><strong>Discussion responses to instructor and other students</strong></td>
<td>Did not enter discussion</td>
</tr>
<tr>
<td><strong>Evidence of critical thinking (application, analysis, synthesis and evaluation)</strong></td>
<td>Did not enter discussion</td>
</tr>
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**Mid-Term Learning Assessment (End of 5th Week)**

The mid-term is a take home test of short answers where student-driven learnings will be assessed. I will determine the extent to which you are involved in the course and the depth and breadth of your understanding of concepts based on these questions. All questions will come from the Content, Video Links and Articles provided to see how well you understand the concepts and can relate them to the examples.

**End of Semester Final Learning Reflection Video**

For the final exam, students should prepare a video of any three important concepts that were learned, what they found most interesting, and how its potential application can help in their careers moving forward. Think of this as a learning reflection paper, but just on video with evidence embedded into it.

The final should include integration of concepts from at least four of the seven modules.
Type of Submission: A video that has you speaking into the camera. You can also provide additional footage and pictures that are used to substantiate your answer and point of view. This output that should be uploaded onto the website. It should be at least 10 minutes long. It should involve answering the following questions

a. Which topic in E-Service Management in Healthcare makes you reflect the most? Give a name to what you’re interested. Define it. For example, what could be the impact of the combination of telemedicine and remote monitoring on the perceived service quality of healthcare?

b. Why is this interesting? There has to be a trigger here. Example continued. How may this vary when viewing the dimensions of service quality?

c. You should have something incremental to what has already been discussed in the course. This has to do with breadth and depth. This means that you should provide more insights through additional research to demonstrate your competence in the area. Here, you could go into details such as reliability of the infrastructure, information detail, increased patient responsibilities etc. (depth) etc. that are applied in both developed and developing countries (breadth).

d. Does it relate to your work currently? If yes, how and if not, where can it apply?

Final Exam Grading Rubric

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>1. Description of a topic in E-service Management in Healthcare that brought out the most amount of learning</td>
<td>20%</td>
</tr>
<tr>
<td>2. Explanation of why this is interesting</td>
<td>20%</td>
</tr>
<tr>
<td>3. Demonstrated competence through application beyond what has been discussed in the course</td>
<td>20%</td>
</tr>
<tr>
<td>4. How it relates to work? If not, where can it apply best?</td>
<td>20%</td>
</tr>
<tr>
<td>5. Presentational clarity</td>
<td>20%</td>
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**Rules of Engagement**

Email ([beldona@udel.edu](mailto:beldona@udel.edu)) is the best way to reach me. I will reply to all emails within 4 Hours of receiving them between *(9 AM and 7 PM on weekdays and 1 PM and 7 PM on weekends)* unless I give notification through an auto-responder about a potential delay.

Every Friday, I will keep myself available for a telephone call between 11 AM and 3 PM EST to answer questions. Calling in to say Hello is also welcome. Really 😃.

If you would like to speak with me in person, please let me know in advance through email, and we can set up a time through Skype or Phone to chat.

All Assignments will be graded and returned within One Week after the Due Date. Penalty for Late Submissions is 3 Points for Delay in Every Day up to One Week.

Quiz feedback and scores can be seen immediately after the due date is up. Quizzes cannot be delayed since feedback is provided immediately after. It is like asking for an exam to be administered after people have walked out with their answer sheets that have all the correct answers. I can only hope that this analogy is acceptable and fair. This is to ensure the integrity of course organization and provide the best experience possible to you all.

All PinUP Discussion Boards will be graded within One Week after the Due Date. People can however add material onto discussion boards towards earning Para Professor status. Material added after due data qualifies only for bonus points. There is no hard and fast rule that to earn Para Professor Status, you have to add material after the due date. Note that only five students can earn this nomination. See details in PinUP Boards.

The Mid-Term and the Final Exams have their own penalties for not submitting within the deadlines. Again, this is to ensure the integrity of course organization and provide the best experience possible to students.