Spring 2014 Course Plan

Operations Analysis & Quality Improvement
(32.512.041/042)

LGH Saints Café 1 Conference Room
Saints Campus
One Hospital Drive
Lowell, MA 01852

Parking and Location:
Lowell General Hospital Saints Campus – Café 1 Conference Room
Parking at Lowell General Saints Campus is free.

From I-495:
Take I-495 to Exit 38 (Route 38). Follow Route 38 toward Lowell for approximately 2 miles. At the fork, bear right at the light and follow to the second stop light. Take a left onto East Merrimack Street and a right into the Saints campus.

Kimberly Flodin, MSHMP
Adjunct Professor
Kimberly_Flodin@uml.edu
603-490-3236

This course teaches a multi-disciplinary approach to operations analysis, process redesign and quality improvement in health care. We focus on the tools and processes used for improving work performance and patient safety in a variety of health care organizations.

Course Objective

Students learn the following:
- The history, development and principles of quality improvement in health care;
- How quality improvement processes have been used in various health care settings;
- The tools and processes used in quality improvement;
- How to structure and implement a quality improvement program; and
- How to collect, analyze and interpret quality improvement data.
Textbooks

Three textbooks are required for this course:


Teaching Approach

The course is taught on a “blended” basis, with both face-to-face and “synchronous” online classes. For each class you will be responsible for:

- **Textbook Reading Assignment.** For each class, you will be reading chapters from one or more of the three textbooks.

- **Other Reading Assignment.** For each class, you will also have one more additional reading assignments. These readings will be available as PDF or Word documents from Blackboard.

The reading assignments are not optional. You will get so much more out of the course if you prepare adequately for our time together. I encourage you to read assignments three times, preferably at different sittings. First, read the assignment quickly to get an overall perspective on what is covered and how the information is organized. Second, read the assignment slowly and carefully for comprehension. Third, quickly read the assignment once more, and highlight key points.

Face-to-Face Classes

The class meets six times on Monday evenings from 5:30 to 8:30 PM. You have reading assignments for every class, including the first.

- **Tools Reading Assignment.** Chapter 5 (about 400 pages long) in The Quality Toolbox provides an almost encyclopedic compendium of quality improvement tools. As seen on pages 8-12 of The Quality Toolbox, the author groups these tools into six categories according to how they are used. For each class, after the first one, you will review the tools included in one of five
categories. Since each category includes a great many tools, you should focus on tools that you think most useful or important. During each class, selected students may be asked to report on one of the tools in that week’s category.

- **Team Exercise.** After the first face-to-face class, we will use or apply The Quality Toolbox tools to address a known health care “quality” problem. Depending upon class size, two or more students will develop a team exercise and direct/facilitate the team exercise in class. The “Team Leaders” will take responsibility for structuring the problem, sharing background materials as appropriate (in advance) and then leading the team exercise. Whatever problem the team chooses, it must involve information and experience that everyone shares, so that all students can contribute to the exercise. For each team exercise, another team will be designated as “Reporters.” The Reporters will take notes and prepare a memorandum summarizing the exercise and findings; and this memorandum will be distributed to all students prior to the subsequent face-to-face class meeting.

The face-to-face classes will be recorded if possible, and the recordings will be available from the class web site. If you are not able to attend a class, you must listen to the recording on your own schedule and prepare a one-page report reflecting upon what was discussed during the class and what you learned. If the class was not recorded, please write up a one page response to the readings for that week.

**Online Blackboard Collaborate Classes**

The class meets eight times on Monday evenings from 7:30 to 9:00 PM. You will have reading assignments for each online class as indicated on the Online Class Calendar.

- **Written Responses.** Prior to each online class, you are asked to answer discussion question(s) in writing and post your response to Blackboard, the course’s web site. Your postings will be available for review and comment by the entire class. It is expected that all students will read their fellow students’ responses prior to that weeks online class. By utilizing this approach to learning your comprehension of and perspective on quality issues, methods and improvements will be greatly enhanced.

- **Individual Online Presentation on Quality Improvement.** After the first online class, each student will make a 15 minute special presentation by sharing information on relevant quality improvement resources or experiences. This presentation could focus on any of the following: (1) a quality-related website (e.g., [www.ihi.org](http://www.ihi.org), [www.jointcommission.org](http://www.jointcommission.org), [www.ahrq.gov](http://www.ahrq.gov)), (2) a
process improvement or quality project in which you have participated OR one that you have researched, (3) a quality-related book.

The online classes will be conducted using Blackboard Collaborate, an Internet-based communications facility accessed through Blackboard. To use Blackboard Collaborate you will need a computer microphone and speaker or head set. A noise cancelling microphone is strongly recommended.

If you are not available to participate in an online class, you must listen to the archived recording on your own schedule and prepare a one-page report reflecting upon the class discussion and what you learned from that discussion. The archived class recordings will be available on Blackboard.

**Grading:** Grades will be calculated using the following point system:

- 30 points - Class Participation
- 20 points - Team Exercise
- 40 points - Discussion Board Postings
- 10 points - Individual presentation

If you miss more than one Face-to-Face class, your grade for the entire course will be reduced. ANY class absence must be pre-approved to be considered an excused absence.

Each discussion board posting will be graded on a 5 point scale. All postings are due at midnight on the due date listed in the course plan. Unless pre-approved, you will be penalized for late submittals.

Final grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA Equivalent</th>
<th>Numeric Range</th>
<th>Grade</th>
<th>GPA Equivalent</th>
<th>Numeric Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
<td>&gt;100</td>
<td>B-</td>
<td>2.7</td>
<td>80-82</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>93-100</td>
<td>C+</td>
<td>2.3</td>
<td>77-79</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>90-92</td>
<td>C</td>
<td>2.0</td>
<td>73-76</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>87-89</td>
<td>C-</td>
<td>1.7</td>
<td>70-72</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>83-86</td>
<td>F</td>
<td>0.0</td>
<td>&gt;60</td>
</tr>
</tbody>
</table>
Plagiarism (whether from published sources, unpublished sources or the Internet) is absolutely not allowed in preparation of written assignments. A first offense will mean a letter reduction in your grade for the entire course; a second offense will result in your failing the course. It is incumbent on you (the student) to learn and understand what is meant by plagiarism and act accordingly. I encourage you to read http://en.wikipedia.org/wiki/Plagiarism. No extenuating circumstances will be allowed, and no second chances will be given. If I find that so much as a single sentence is copied without attribution (even if a word or two is changed), the above sanctions will be applied.
# Face-to-Face Class Calendar

<table>
<thead>
<tr>
<th>Class Date</th>
<th><strong>Textbook Reading Assignments</strong></th>
<th><strong>Other Reading Assignments</strong></th>
<th><strong>Quality Toolbox Assignment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>February 3</td>
<td>QT: Chapters 1, 2 and 3</td>
<td>Rising to the Challenge</td>
<td></td>
</tr>
<tr>
<td>February 24</td>
<td>CQI: Chapters 1, 2 and 3</td>
<td>Hospitals Prescribe Big Data to Track Doctors at Work&lt;br&gt;Scorecard Reveals Wide Disparities in Care Across the Country</td>
<td>QT: Project Planning &amp; Implementing Tools</td>
</tr>
<tr>
<td>March 10</td>
<td>CQI: Chapters 7, 8 and 9</td>
<td>The Cost Conundrum</td>
<td>QT: Idea Creation Tools</td>
</tr>
<tr>
<td>March 31</td>
<td>CQI: Chapters 13 and 14</td>
<td>The Hot Spotters&lt;br&gt;Big Med</td>
<td>QT: Process Analysis Tools</td>
</tr>
<tr>
<td>April 14</td>
<td>CQI: Chapters 15 and 16</td>
<td>The Checklist&lt;br&gt;The Bell Curve</td>
<td>QT: Cause Analysis Tools</td>
</tr>
<tr>
<td>May 5</td>
<td>CQI: Chapters 19 and 20</td>
<td>Ten Things We Know Now That We Wish We Had Known Then</td>
<td>QT: Evaluation &amp; Decision-Making Tools</td>
</tr>
</tbody>
</table>

QT: Quality Toolbox<br>CHC: Curing Health Care<br>BP: The Best Practice
## Online Collaborate Class Calendar

<table>
<thead>
<tr>
<th>Class Date</th>
<th>Reading Assignments</th>
<th>Discussion Question</th>
<th>Assignment Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 27</td>
<td>BP: Introduction, Chapters 1-4</td>
<td>What did you learn?</td>
<td>January 25</td>
</tr>
<tr>
<td>February 10</td>
<td>BP: Chapters 5, 6 and 7</td>
<td>What did you learn?</td>
<td>February 8</td>
</tr>
<tr>
<td>February 17</td>
<td>BP: Chapters 8,9 and 10</td>
<td>What did you learn?</td>
<td>February 15</td>
</tr>
<tr>
<td>March 3</td>
<td>CQI: Chapters 4,5 and 6</td>
<td>What did you learn?</td>
<td>March 1</td>
</tr>
<tr>
<td>March 24</td>
<td>CQI: Chapters 10, 11 and 12</td>
<td>What did you learn?</td>
<td>March 22</td>
</tr>
<tr>
<td>April 7</td>
<td>The Best Care Anywhere</td>
<td>Answer any or all of the following questions: (1) Why or how did the VHA accomplish such a turnaround? (2) Is VHA's experience replicable elsewhere in the civilian healthcare system? (3) What has been reported more recently relative to VHA quality and quality initiatives? (4) Do we have other similarly positive and encouraging quality stories in other healthcare organizations, either here or abroad?</td>
<td>April 5</td>
</tr>
<tr>
<td>April 21</td>
<td>Is Health Care Ready for Six Sigma Quality? Slow Ideas</td>
<td>Report on the experience of a healthcare provider that has embraced a significant quality improvement program.</td>
<td>April 19</td>
</tr>
<tr>
<td>April 28</td>
<td>CQI: Chapters 17 and 18</td>
<td>What did you learn?</td>
<td>April 26</td>
</tr>
</tbody>
</table>

QT: Quality Toolbox; CHC: Curing Health Care; BP: The Best Practice