



UNM

SCHOOL of PUBLIC
ADMINISTRATION

**Syllabus for PADM 590: Health Analytics
Spring 2015**

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Office Hours: Tuesdays, 2-4 PM and by appointment

Class: Tuesday, 7-9:30 PM

"In God we trust. All others bring data"

-W. Edwards Deming

Course Description

This course will examine a variety of techniques to identify, measure, and improve quality and productivity in health service organizations. A range of practical issues related to quality management will also be considered, including teamwork, leadership, and the role of information technology in the support of quality initiatives. Topics include historic and contemporary view of quality (including 6 Sigma, lean, and value-based purchasing), statistical quality improvement tools and methods, and process flow and design. The intent is to provide students with insights into how quality and utilization programs are administered in fact as well as theory.

Course Expectations

The success of this course relies heavily upon how engaged participants are in the components of the course. The role of the instructor is to facilitate and guide learning through class discussions, activities, guest presentations and feedback. The course favors an active role for participants over the more passive role taken in a lecture-oriented format. Be prepared to engage the course material and each other to draw on assigned readings and your experiences working and interacting with healthcare organizations. We will work from the premise that all participants bring important knowledge, skills, experiences and insights to the course that we can draw upon to create a successful collaborative learning experience.

Course Objectives

Students will be able to do the following at the conclusion of the course:

1. Apply quality models using different theoretical frameworks and concepts
2. Learn a defined process for analyzing a set of health care related data
3. Describe the conceptual differences between quality assurance, quality management, and continuous quality improvement
4. Analyze health organizational performance using different quality measures and tools
5. Organize performance tools to change organizational processes to improve quality outcomes
6. Explain the importance of process in the management of quality systems in health organizations
7. Identify key external health organization quality evaluations
8. Assess appropriate performance measures for health organizations
9. Discover how to answer strategic or operational questions using basic analytic techniques
10. Understand how to read, produce, and present data analytic reports

Required Text

The primary text for the course is Healthcare Analytics for Quality and Performance Improvement by Strome. The book is available for sale OR you can rent it (hardcopy or electronic download). The following link provides one source for the book. There are likely many others. Publisher's website: goo.gl/ghT4kn

Course Requirements and Grading Policy

The final course grade is based on your performance on two exams (midterm and final), and five problem sets. Student grades will be based on:

Problem Sets:	50 points
Midterm Exam:	25 points
Final Exam:	25 points
Total:	100 points

Problem Sets: One of the best ways to learn the quantitative tools discussed in this course is through practice. The problem sets are intended to develop your mastery of the concepts and tools presented in the course. Each problem set will be based on material drawn from the course textbook and other sources. Each problem set is due the day of class by 5:45 p.m. Problem sets will be made available on our course Blackboard shell at least two 7 calendar days prior to their due date.

Exams: The midterm and final exam are worth 25 points each. Exams will be a traditional in-class, closed-book, closed-note format. No external resources (internet, classmates, outside experts) are permitted.

Grading Scale:

A+: 99 – 100%
A: 93 – 98%
A-: 90 – 92%
B+: 87 – 89%
B: 83 – 86%
B-: 80 – 82%
C+: 75 – 79%
C: 70 – 74%
C-: 65 – 69%
Fail: Below 65%

Attendance Policy

Regular and punctual attendance is required. UNM Pathfinder policies apply, which in part means instructor drops based on non-attendance are possible. This policy applies regardless of the grading option you have chosen.

Accommodation Statement

Accessibility Services (Mesa Vista Hall 2021, 277-3506) provides academic support to students who have disabilities. If you think you need alternative accessible formats for undertaking and completing coursework, you should contact this service right away to assure your needs are met in a timely manner. If you need local assistance in contacting Accessibility Services, see the Bachelor and Graduate Programs office.

Academic Integrity

The University of New Mexico believes that academic honesty is a foundation principle for personal and academic development. All University policies regarding academic honesty apply to this course. Academic dishonesty includes, but is not limited to, cheating or copying, plagiarism (claiming credit for the words or works of another from any type of source such as print, Internet or electronic database, or failing to cite the source), fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. The University's full statement on academic honesty and the consequences for failure to comply is available in the college catalog and in the Pathfinder.

Cell Phones and Technology

As a matter of courtesy, please turn off cell phones, pagers (LOL), and other communication and entertainment devices prior to the beginning of class. Notify me in advance if you are monitoring an emergency, for which cell phone ringers should be switched to vibrate.

Library and Tutorial Services

UNM-Main campus provides many library services and some tutorial services for distance students. For library services, go to <http://www.unm.edu/libraries/> to link to a specific library or to contact a librarian. For tutorial services, go to <http://caps.unm.edu/online> to explore UNM's online services.

Schedule of Activities*

Week	Date	Topic	Reading
Week 1	13-Jan	Introduction to Quality	
Week 2	20-Jan	Fundamentals of Healthcare Analytics	Strome Ch 1-2, 4
Week 3	27-Jan	Working with Data	Strome Ch 6-7
Week 4	3-Feb	Basic Statistical Methods and Control Chart Principles I	Strome Ch 9
Week 5	10-Feb	Basic Statistical Methods and Control Chart Principles II	Strome Ch 9
Week 6	17-Feb	Leveraging Analytics in Quality Improvement Activities	Strome Ch 8
Week 7	24-Feb	Usability and Presentation of Information	Strome Ch 10
Week 8	3-Mar	Midterm	
Week 9	10-Mar	Spring Break, No Class	
Week 10	17-Mar	Developing an Analytics Strategy to Drive Change	Strome Ch 3
Week 11	24-Mar	Lean Healthcare	
Week 12	31-Mar	Data Quality and Governance	Strome Ch 5
Week 13	7-Apr	Advanced Analytics I	Strome Ch 11
Week 14	14-Apr	Advanced Analytics II	
Week 15	21-Apr	Pregnancy Buffer	
Week 16	28-Apr	Pregnancy Buffer	
Week 17	5-May	Final Exam	

**The Schedule of Activities is subject to change. Minor changes will be announced in class, major ones provided in writing.*