BIOS 844: Leadership in Biostatistics

Fall 2015

Instructor: Sonia Davis, DrPH, Professor of the Practice of Biostatistics
137 E Franklin St, Suite 400 (CSCC)
Office Hours: by appointment
Office Phone Number: 919-966-8333
Email: Sonia.Davis@unc.edu

Lectures: Tuesdays 2:00 PM – 4:45 PM, Room 1302 MCG

Learning Objectives: The main objective of the course is for students to learn how and where biostatisticians can offer leadership (statistical and otherwise) in both academic and non-academic public health settings.

Assessments: Class participation and pre-class readings are vital to the course: 30%
Leadership Style Written Assignment: 15%
Student Presentation: 15%
Strategic Planning Group Assignment: 15%
Final Written Assignment: 25%

Course Assistant: Forrest DeMarcus
137 E Franklin St, Suite 400 (CSCC)
Office Phone Number: 919-962-3268
Email: demarcus@email.unc.edu

Course Prerequisite: BIOS 841 or permission of the instructor

Lecture Notes: Sakai Site BIOS844_2015

Course Textbooks


Course Evaluation: Complete the online evaluation in the last two weeks of the semester. I appreciate your thoughtful feedback to assist me in structuring the course.
GUEST LECTURERS AND SPEAKERS

David Steffen, DrPH, Clinical Assistant Professor, UNC Public Health Leadership Program
Will Frey, UNC HR Training and Talent Development
Bill Sollecito, DrPH, UNC Public Health Leadership Program
Lori Evarts, MPH, Clinical Assistant Professor, UNC Public Health Leadership Program
Lisa LaVange, PhD, Director of Biostatistics, CDER, FDA
Bob Rodriguez, PhD, Senior Director, Statistical R&D, SAS Institute. Former President, ASA
Olga Marchenko, PhD, Vice President, Quantitative Decision Strategies and Analytics, Quintiles
Matthew Gurka, PhD, Founding Chair, Department of Biostatistics, West Virginia University

COURSE OVERVIEW

The general goal of this course is for students to understand how and where biostatisticians can offer leadership (statistical and otherwise) in both academic and non-academic public health settings. It is seen as complementary to BIOS 841, which emphasizes basic methodological competence in practical applications, but does not cover leadership in biostatistics.

The proposed teaching approach is to combine an examination of leadership principles with practical exposure to these principles in biostatistics by learning from the experiences of biostatisticians who have served in various statistical leadership roles. Classroom sessions dealing with principles and methods will follow a lecture format and group exercises. Other sessions will involve presentations and discussions. The quality of the participation in class and graded assignments will determine each student’s grade in the course.

COURSE OBJECTIVES

This course is designed for students to learn:

1. About leadership and its basic principles
2. The different leadership “styles” one might adopt
3. Where in academic and non-academic settings in public health there are opportunities for biostatisticians to provide both statistical and non-statistical leadership
4. About specific elements of leadership in: (i) research teams of which biostatisticians are members, (ii) administrative and non-administrative roles in academia, (iii) organizations in which biostatisticians are employed, and (iv) settings in which biostatisticians provide leadership through professional service
5. (Through practical exposure) what prominent biostatisticians have experienced as leaders and thereby learned about leadership
   - Guest lectures will be presented by current leaders in biostatistics
   - Historical examples of leaders will be presented as vignettes throughout the course
EXPECTATIONS OF STUDENTS

Class sessions will often have group discussions and guest speakers. Each student should be an active contributor to all group discussions and activities. Class participation, including in-class exercises and interaction with guest lecturers will be an important part of the final grade. Please demonstrate respect for your classmates by turning off all cell phones or beepers. While class is in session, please do not use laptop computers for non-class related purposes. Attendance at each class is expected. More than one unexcused absence will result in a deduction to the final grade by 10 percentage points per unexcused absence. Unexcused tardy behavior or early departure will be treated on a similar, pro-rated basis.

HONOR CODE

The University of North Carolina at Chapel Hill has had a student-led honor system for over 100 years. Academic integrity is at the heart of Carolina and we all are responsible for upholding the ideals of honor and integrity. The student-led Honor System is responsible for adjudicating any suspected violations of the Honor Code, and all suspected instances of academic dishonesty will be reported to the honor system. Information, including your responsibilities as a student, is outlined in the Instrument of Student Judicial Governance. Your full participation and observance of the Honor Code is expected.

Four general responsibilities under the Code. The Instrument of Student Judicial Governance, which contains the provisions of the Honor Code, states that students have four general responsibilities under the Code:

1. Obey and support the enforcement of the Honor Code;
2. Refrain from lying, cheating, or stealing;
3. Conduct themselves so as not to impair significantly the welfare or the educational opportunities of others in the University community; and
4. Refrain from conduct that impairs or may impair the capacity of University and associated personnel to perform their duties, manage resources, protect the safety and welfare of members of the University community, and maintain the integrity of the University.

Plagiarism. Plagiarism in the form of deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise.

Authorized vs. Unauthorized Collaboration. Homework, presentations and written assignments are to be your own work. It is your responsibility, if you have any doubt, to confirm whether or not collaboration is permitted.

Additional Information. Additional information is available from the Office of the Dean of Students, or the Honor System [http://honor.unc.edu](http://honor.unc.edu).
COURSE SCHEDULE

The professor reserves the right to make changes to the syllabus, including project due dates and test dates, when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.

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<thead>
<tr>
<th>Week : Date</th>
<th>Topic</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1: Aug 18</td>
<td>Introduction to Leadership</td>
<td>Assignment Posted: MBTI and EQ-I online assessments</td>
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<td>2: Aug 25</td>
<td>1-on-1 communication</td>
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<td>3: Sept 1</td>
<td><strong>Guest Lecture: Dr David Steffen</strong> Emotional Intelligence</td>
<td>Assignment Posted: paper on leadership and communication types</td>
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<tr>
<td>4: Sept 8</td>
<td><strong>Guest Lecture: Will Frey</strong> MBTI and Leadership Styles</td>
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<td>5: Sept 15</td>
<td>Leadership Types</td>
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<td>6: Sept 22</td>
<td><strong>Guest Lecture: Dr Bill Sollecito</strong> Motivation and Empowerment</td>
<td>Assignment Due: paper on leadership and communication types</td>
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<td>7: Sept 29</td>
<td>Diversity in Leadership Presentation Skills ** Sonia out of town **</td>
<td>Assignment Posted: student presentation</td>
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<td>8: Oct 6</td>
<td><strong>Guest Lecture: Lori Evarts</strong> Team Leadership</td>
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<td>9. Oct 13</td>
<td>Financial Leadership Student presentations</td>
<td>Assignment Due: Student Presentations</td>
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<td>10: Oct 20</td>
<td><strong>Guest Lecture: Dr Bill Sollecito</strong> Vision</td>
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<td>11: Oct 27</td>
<td>Strategic Planning and Strategic Innovation</td>
<td>Assignment Posted: strategic planning</td>
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<td>12: Nov 3</td>
<td><strong>Guest Speaker: Dr Bob Rodriguez</strong> Professional Service/Society Leadership</td>
<td>Final Assignment Posted</td>
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<td>13: Nov 10</td>
<td><strong>Guest Speaker: Dr Lisa LaVange</strong> Government Agency Leadership</td>
<td>Assignment Due: strategic planning</td>
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<td>14: Nov 17</td>
<td><strong>Guest Speaker: Dr Olga Marchenko</strong> Industry Leadership</td>
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<td>15: Nov 24</td>
<td><strong>Guest Speaker: Dr Matt Gurka</strong> Academic Leadership</td>
<td>Thanksgiving week</td>
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<td>16: Dec. 1</td>
<td>Final Leadership Topics</td>
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<td>Sat Dec 5^{th} 12:00</td>
<td>Leadership wrap-up and Lunch</td>
<td>Final Assignment Due by 12:00</td>
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