Instructor Name: Robert Parker  
Room Number: CTRB 5219  
Phone Number: 352-294-5906  
Email Address: rlp176@phhp.ufl.edu  
Office Hours: W 9:30-10:30am  
Teaching Assistants: Hanzhi Gao  
Preferred Course Communications: email or CANVAS Inbox  

**Prerequisites:** PHC 6050c: Biostatistical Methods I; PHC 6051: Biostatistical Methods II; PHC 6937: Introduction to Biostatistical Theory; PHC 6937: Biostatistical Computing.  

**PURPOSE AND OUTCOME**  

**Course Overview**  
This course covers communication, management, organization, computation, and thinking skills necessary to consulting in biostatistics.  

**Relation to Program Outcomes**  
Successful completion of this course fulfills the consulting requirement of the MS and PhD programs in Biostatistics.  

**Course Objectives and/or Goals**  
By the end of this course, the student should be able to:  
(1) Understand skills necessary to be a successful biostatistical consultant.  
(2) Identify key issues in proposal development, study design, data management, data analysis and study report.  
(3) Interpret and apply biostatistical methods using state-of-the-art software in a way that meets the goals of a collaborating health scientist.  
(4) Interpret biostatistical analyses while remaining aware of limitations.  

**Instructional Methods**  
Class sessions will be a combination of student presentations of projects. Students are expected to take an active role in initiating and leading discussions and debates.
## DESCRIPTION OF COURSE CONTENT

### Topical Outline/Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Videos</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/7-1/11</td>
<td>LEAPS Study</td>
<td>Choose consulting group project topic</td>
</tr>
<tr>
<td>2</td>
<td>1/14-1/18</td>
<td>Case Study 1: Initial Consult – In Class</td>
<td>HW1 – Consult Notes and Follow-up Questions</td>
</tr>
<tr>
<td>3</td>
<td>1/21-1/25</td>
<td>Intro to Sample Size Calculations</td>
<td>HW2 – Collaboration Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stimrouter study</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1/28/-2/1</td>
<td>Case Study: Sample Size Calculation Basics of Biostatistics</td>
<td>HW3 – Revisions of Collaboration Plan</td>
</tr>
<tr>
<td>5</td>
<td>2/4-2/8</td>
<td>Recipe to be a Successful Collaborator</td>
<td>HW4 – Statistical Analysis and Findings</td>
</tr>
<tr>
<td>6</td>
<td>2/11-2/15</td>
<td>History of Clinical Trials</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cambridge Analytica Consulting Experience</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2/18-2/22</td>
<td></td>
<td>Group Project Presentation 1 – In Class</td>
</tr>
<tr>
<td>8</td>
<td>2/25-3/1</td>
<td>Intro to Consulting Case Study 2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3/4-3/8</td>
<td>Spring Break – No Class</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3/11-3/15</td>
<td></td>
<td>Case Study 2: Initial Consult – In class</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HW 5 – Initial Consult Notes</td>
</tr>
<tr>
<td>11</td>
<td>3/18-3/22</td>
<td>Consulting Controversies</td>
<td>HW 6 – Statistical Analysis Plan</td>
</tr>
<tr>
<td>12</td>
<td>3/25-3/29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>4/1-4/5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>4/8-4/12</td>
<td></td>
<td>HW 7 – Statistical Analysis and Report</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HW 8 – Present Analysis Results and Peer Review</td>
</tr>
<tr>
<td>15</td>
<td>4/15-4/19</td>
<td></td>
<td>Group Project Presentation 2 – In Class</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Final Report for Group Project Due</td>
</tr>
</tbody>
</table>
Course Materials and Technology
Course information, readings, and grades are available on the Canvas system at http://lss.at.ufl.edu/. You must have a Gatorlink account to log on.

Recommended texts are: 1) Statistical Consulting by Javier Cabrera and Andrew McDougall; and 2) Statistical Consulting: A Guide to Effective Communication by Janice Derr.

For technical support for this class, please contact the UF Help Desk at:
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

ACADEMIC REQUIREMENTS AND GRADING

Assignments
There will be three projects: A semester long group project which focuses on learning a new method needed for design or analysis of an experiment or dataset, and two consulting case study projects in which students will receive a (mock) client request for help with a data analysis.

Grading
Grades will be based on the group project (40%) and two consulting case study projects (30% each). All deadlines must be met. Any assignment turned in after the deadline will be penalized, including non-acceptance of the assignment, at the discretion of the instructors. No midterm or final exam will be required in this course.

Policy Related to Make up Exams or Other Work
Please note: Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance
All faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior
Excused absences follow the criteria of the UF Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays). Due date extensions are only granted for excused absences and must be communicated with the instructor prior to the due date when possible.

Academic Integrity
Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:
“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/ http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

SUPPORT SERVICES

Accommodations for Students with Disabilities
If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health
Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from: Alachua County Crisis Center (352) 264-6789 http://www.alachua county.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.