I. COURSE DOMAIN AND BOUNDARIES
This skill lab will introduce students to the Stata statistical software package. Students will learn basic data concepts such as importing data, managing data, creating variables, graphing, univariate statistics, bivariate statistics, and multivariate statistics using Stata. Basic statistical analysis techniques will be covered for both continuous and categorical outcome variables.

II. MPH FOUNDATIONAL KNOWLEDGE AND COMPETENCIES ADDRESSED IN THIS COURSE
A. Foundational Knowledge
   • Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health.

B. Foundational Competencies
   • Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.
   • Apply and interpret common statistical methods for inference (e.g., ANOVA, linear and logistic regression, survival analysis) found in public health studies.
   • Interpret results of data analysis for public health research, policy or practice.

III. BROWN SCHOOL ACADEMIC POLICIES
Academic Integrity: If a faculty member or student suspects that academic or professional integrity has been violated, they are required to submit an Academic Integrity or Professional Integrity Violation form found on Inside Brown for review by the Assistant Dean of the program. The Assistant Dean or designated representative will aid in the investigation of the violation, which includes but is not limited to gathering relevant evidence; conversations with the instructor,
student(s) involved, witnesses, and others as necessary. Depending on the seriousness of the case, the Assistant Dean may choose to refer the matter directly to the University Student Conduct Board. This referral procedure will generally be followed if it is believed that the penalty is likely to involve suspension or expulsion from the University. The Assistant Dean for the program or designated representative will offer to meet privately with the student(s) against whom the complaint has been made. It is the student’s responsibility to familiarize themselves with the behaviors that constitute an academic integrity violation requiring referral.

Student Handbook 2019

Accommodations: If you have a learning, sensory, or physical disability or any other diagnosis that requires accommodations and/or assistance in lectures, reading, written assignments, and/or exam taking, please work with the Disability Resource Center, a University-wide resource that provides academic accommodations support and referrals. After requesting academic accommodations by providing appropriate documentation, students approved for accommodations will provide an Accommodation Letter to the instructor and are encouraged to work directly with the instructor to discuss specific course needs. The student’s Academic Advisor and/or the Assistant Dean for Academic Affairs can support a student through this process.

Pronouns: The Brown School embraces and promotes gender expansiveness as reflective of the lived experiences of many students, staff, faculty and members of our expanded community. The correct use of an individual’s pronouns is a critical part of an individual’s identity and of building an inclusive community. Students, faculty and staff are encouraged to use pronouns during introductions, are expected to use expressed pronouns of all Brown School community members, and are encouraged to apologize when mistakes are made. Educational resources are available at: https://campuslife.wustl.edu/lgbtqia/lgbt-resources/gender-pronouns/

English Language Proficiency: If your English language proficiency is such that you may need special assistance in lectures, reading, written assignments, and/or exam taking, please communicate these needs to your instructor who may refer you to the Brown Communications Lab. If you would like help seeking additional English language resources, please visit the Global Programs Suite in Brown 309. You may also find the Academic Assistance resources available through the Office for International Students and Scholars to be helpful.

Professional Use of Electronic Devices in the Classroom: Computers or other electronic devices, including “smart pens” (devices with an embedded computer and digital audio recorder that records the classroom lecture/discussion and links that recording to the notes taken by the student), may be used by students at the discretion of the faculty member to support the learning activities in the classroom. These activities include taking notes and accessing course readings under discussion. If a student wishes to use a smart-pen or other electronic device to audio record lectures or class discussions, they must notify the instructor in advance of doing so. Permission to use recording devices is at the discretion of the instructor, unless this use is an accommodation approved by Disability Resources.

Nonacademic use of laptops and other devices and use of laptops or other devices for other coursework is distracting and seriously disrupts the learning process for other people in the classroom. Neither computers nor other electronic devices are to be used in the classroom during class for nonacademic reasons or for work on other coursework. Nonacademic use includes
emailing, texting, social networking, playing games, instant messaging, and use of the Internet. Work on other coursework may include, but is not limited to, use of the Internet, writing papers, using statistical software, analyzing data, and working on quizzes or exams. The nonacademic use of cell phones during class time is prohibited, and they should be set on silent before class begins. In the case of an emergency, please step out of the room to take the call. The instructor has the right to hold students accountable for meeting these expectations, and failure to do so may result in a loss of participation or attendance points, a loss of the privilege of device use in the classroom, or being asked to leave the classroom.

Religious Holidays: The Brown School recognizes the individual student’s choice in observing religious holidays that occur during periods when classes are scheduled. Students are encouraged to arrange with their instructors to make up work missed as a result of religious observance, and instructors are asked to make every reasonable effort to accommodate such requests.

IV. WASHINGTON UNIVERSITY ACADEMIC SUPPORT POLICIES

Accommodations based upon relationship or sexual violence, including sexual harassment and stalking: The University is committed to offering reasonable accommodations to students who are victims of relationship or sexual violence. Students are eligible for accommodations regardless of whether they seek criminal or disciplinary action. Depending on the specific nature of the allegation, such accommodations may include but are not limited to implementation of a no-contact order, emergency housing, course/classroom assignment changes, assignment extensions and other academic support services. If you need to request such accommodations, please direct your requests to rsvpcenter@wustl.edu or call directly to 314-935-3445. There are four licensed RSVP counselors who serve as confidential resources. However, to implement requests for accommodations, limited information will be shared with the appropriate university administrator and/or faculty. The University will maintain as confidential any accommodations or protective measures provided to an individual student so long as it does not impair the ability to provide such measures.

If a student comes to me to discuss or disclose an instance of sexual assault, sex discrimination, sexual harassment, dating violence, domestic violence or stalking, or if I otherwise observe or become aware of such an allegation, I will keep the information as private as I can, but as a faculty member of Washington University, I am required to immediately report it to my Department Chair or Dean or directly to Ms. Jessica Kennedy, the University’s Title IX Director. If you would like to speak with directly Ms. Kennedy directly, she can be reached at (314) 935-3118, jw kenned y@wustl.edu, or by visiting the Title IX office in Umrah Hall. Additionally, you can report incidents or complaints to the Office of Student Conduct and Community Standards or by contacting WUPD at (314) 935-5555 or your local law enforcement agency. See: Title IX

You can also speak confidentially and learn more about available resources at the Relationship and Sexual Violence Prevention Center by calling (314) 935-3445 for an appointment or visiting the 4th floor of Seigle Hall. See: RSVP Center

Bias Reporting: The University has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of bias, prejudice or discrimination against a student can report their experiences to the University’s Bias Report and Support System (BRSS) team. See: brss.wustl.edu.
Mental Health: Mental Health Services’ professional staff members work with students to resolve personal and interpersonal difficulties, many of which can affect the academic experience. These include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. See Mental Health Resources.

Center for Diversity and Inclusion (CDI): The Center of Diversity and Inclusion (CDI) supports and advocates for undergraduate, graduate, and professional school students from underrepresented and/or marginalized populations, creates collaborative partnerships with campus and community partners, and promotes dialogue and social change. One of the CDI’s strategic priorities is to cultivate and foster a supportive campus climate for students of all backgrounds, cultures and identities. See: diversityinclusion.wustl.edu/

Additional Issues or Concerns: If you feel that you need additional supports in order to be successful in your time at Brown, beyond the mentioned accommodations, please contact your Academic Advisor or Danielle Bristow, Assistant Dean for Academic Affairs. They can assist you in navigating a myriad of concerns.

V. READINGS AND SOFTWARE

Required readings:
There are no required readings or textbooks in this course.

Suggested readings:
http://catalog.wustl.edu/search/a?searchtype=i&searcharg=9781498721998+&SORT=D

Software:
Purchasing Stata software is not required this semester. The instructor will discuss purchase options for long-term use.

VI. ORGANIZATION OF COURSE

We will cover course content through instructor lecture material, individual and team exercises, and discussions designed to stimulate an appreciation for the use of Stata software in statistical analysis. I will provide handouts, additional readings, and supplementary materials in class where appropriate. Weekly attendance, class participation, and full preparation by each student for each class are expected. Students who cannot attend a class must email the instructor in advance. This course outline serves as a guide and is subject to change if necessary.

VII. ROLE OF FACULTY AND STUDENT

The instructor will: prepare and deliver course material, be available to students after class and by appointment for consultation, and provide timely and clearly explained feedback on student performance. The instructor expects students to: attend each class on time; complete all assignments in a timely manner; come to class prepared; participate in class discussions; be courteous to the instructor and fellow students; seek any necessary clarification regarding course expectations from the instructor; and provide the instructor with feedback about the effectiveness of the course. Any problems with attendance, meeting deadlines, or completing assignments should be discussed promptly with the instructor.
VIII. ASSIGNMENTS AND GRADING CRITERIA

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Type</th>
<th>Date Due</th>
<th>Percent of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Set #1</td>
<td>Individual</td>
<td>9/4</td>
<td>18%</td>
</tr>
<tr>
<td>Problem Set #2</td>
<td>Individual</td>
<td>9/11</td>
<td>18%</td>
</tr>
<tr>
<td>Problem Set #3</td>
<td>Individual</td>
<td>9/18</td>
<td>18%</td>
</tr>
<tr>
<td>Problem Set #4</td>
<td>Individual</td>
<td>9/25</td>
<td>18%</td>
</tr>
<tr>
<td>Problem Set #5</td>
<td>Individual</td>
<td>10/2</td>
<td>18%</td>
</tr>
<tr>
<td>Active participation (attendance and class participation)</td>
<td>Individual</td>
<td>All semester</td>
<td>10%</td>
</tr>
</tbody>
</table>

**TOTAL** 100%

Grading Scale:  
- A (100-95)  
- A- (90-94)  
- B+ (88-89)  
- B (85-87)  
- B- (80-84)  
- C+ (78-79)  
- C (75-77)  
- C- (70-74)  
- F (≤69)

**Types of Assignments:** All problem sets will contain a series of tasks or questions applying content taught during lecture. Assignments must be completed independently.

**Policy on Late Assignments:** The instructor will accept late assignments for an extreme emergency, such as death in the family. Health-related issues will need to be documented with a note from the doctor attesting to the student’s ill health. Except under extremely unusual circumstances, papers must be turned in at the beginning of class on the due date. Late assignments will result in a deduction of 5% per day for each day late (including weekends) off the assignment score unless prior approval is obtained from the instructor or a compelling situation prevents prior approval.

**Extra Credit:** Five points will be added to the problem set with the lowest grade upon completion of the end-of-semester course evaluation. Other relevant extra credit opportunities may be announced throughout the course at the discretion of the instructor.

IX. MPH COMPETENCY ALIGNMENT TO ASSESSMENT OPPORTUNITY

<table>
<thead>
<tr>
<th>MPH Competency</th>
<th>Assessment Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population’s health.</td>
<td>PS: #1, #2, #3, #4, #5</td>
</tr>
<tr>
<td>Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.</td>
<td>PS: #1, #2, #3, #4, #5</td>
</tr>
<tr>
<td>Apply and interpret common statistical methods for inference (e.g., ANOVA, linear and logistic regression, survival analysis) found in public health studies.</td>
<td>PS: #2, #3, #4, #5</td>
</tr>
</tbody>
</table>
Interpret results of data analysis for public health research, policy or practice.  

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
<th>Topics</th>
<th>Assignments Due*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/28</td>
<td>Overview of Stata</td>
<td>Pre-Class Survey</td>
</tr>
<tr>
<td>2</td>
<td>9/4</td>
<td>Data Management</td>
<td>Problem Set #1</td>
</tr>
<tr>
<td>3</td>
<td>9/11</td>
<td>Univariate Statistics</td>
<td>Problem Set #2</td>
</tr>
<tr>
<td>4</td>
<td>9/18</td>
<td>Bivariate and Multivariate Statistics</td>
<td>Problem Set #3</td>
</tr>
<tr>
<td>5</td>
<td>9/25</td>
<td>Advanced Topics</td>
<td>Problem Set #4</td>
</tr>
<tr>
<td></td>
<td>10/2</td>
<td></td>
<td>Problem Set #5</td>
</tr>
</tbody>
</table>

*Assignments are due 60 minutes before the start of the respective class date (1:00pm).