## CSDE 502: Population Studies Proseminar Winter 2021 Syllabus

#### **Instructor and Office Hours**

<u>Phil Hurvitz</u> Raitt Hall 218 F <u>phurvitz@uw.edu</u> Office hours by appointment: See my <u>schedule</u>

### **Time and Location**

Friday 10:30 AM to 12:20 PM Zoom link: https://washington.zoom.us/j/93089524851

### **Course Description**

This is a required course for students wishing to obtain a Demographic Methods Graduate Certificate from CSDE (<u>https://csde.washington.edu/training/demographic-certificate/</u>). However, it is open to all interested students.

This course is meant to fill a perceived curriculum gap between methods courses that emphasize study design and statistics courses that teach statistical analysis. It focuses on applied methods for data preparation with a particular focus on documentation and reproducibility. Techniques in file and data management, data cleaning and variable creation, working with demographic data, creating visual displays, and documenting work flows will be covered within the R/RStudio/RMarkdown integrated development environment. In short, this course teaches introductory "data wrangling" within a framework of documentation, transparency, and reproducibility, which are fundamental cornerstones of research. Two main data sets will be used as needed.

#### **Pre-requisites**

Introductory graduate level research methods and statistics, basic knowledge of R and RStudio. Students will need to obtain a CSDE computing account (see <a href="https://csde.washington.edu/computing/accounts/">https://csde.washington.edu/computing/accounts/</a>).

### **Requirements and Grading**

This is a 2 credit, pass/fail course. In order to pass the course, students must satisfactorily complete all of the homework assignments and attend class. Weekly sessions will include brief lectures followed by hands-on instructional sessions. Assignments are to be completed outside of scheduled class times. There are no exams.

### **Dates of instruction**

January	February	March
Su Mo Tu We Th Fr Sa	Su Mo Tu We Th Fr Sa	Su Mo Tu We Th Fr Sa
1 2	1234 <b>5</b> 6	1 2 3 4 <b>5</b> 6
34567 <b>8</b> 9	7 8 9 10 11 <i>1</i> 2 13	7 8 9 10 11 <i>1</i> 2 13
10 11 12 13 14 <i>1</i> 5 16	14 15 16 17 18 <b>19</b> 20	14 15 16 17 18 19 20
17 18 19 20 21 <b>22</b> 23	21 22 23 24 25 <b>26</b> 27	21 22 23 24 25 26 27
24 25 26 27 28 <b><u>29</u></b> 30	28	28 29 30 31

## **Course Outline**

Class 1: Jan 8	Course introduction; Introduction to R/RStudio/RMarkdown; file systems	
Class 2: Jan 15	R: data structures; tidyverse; more R/RStudio/RMarkdown	
Class 3: Jan 22	R: more R/RStudio/RMarkdown: Rmd to docx; R graphics	
Class 4: Jan 29	R: functions, sampling	
Class 5: Feb 5	Git: file versioning and code repository	
Class 6: Feb 12	Add Health Data: variable creation	
Class 7: Feb 19	Add Health Data: more variable creation	
Class 8: Feb 26	Add Health Data: scale scoring	
Class 9: Mar 5	Add Health Data: household roster	
Class 10: Mar 12	Human Mortality Database: reproducible research project	

## Class email list: csde502a\_wi21@uw.edu

Please send any questions you have about the course materials, assignments, programming, etc. to the class e-mail list. It is likely that more than one person will have the same question, therefore all students will be able to benefit from the question/answer/discussion. E-mail list archives are available at <a href="https://mailman11.u.washington.edu/mailman/private/csde502a\_wi21/">https://mailman11.u.washington.edu/mailman/private/csde502a\_wi21/</a>.

# Class content web site: <a href="http://staff.washington.edu/phurvitz/csde502\_winter\_2021">http://staff.washington.edu/phurvitz/csde502\_winter\_2021</a>

All of the main content for the course will be available either within this site or linked from the site.

# Class materials can be found in the course's Canvas site:

<u>https://canvas.uw.edu/courses/1434040</u>. The Canvas site will be used mainly for collection and return of weekly assignments. Most relevant material will be on the course web site.

## Assignments

Assignments are due the Thursday at 09:00 AM the week following when the assignment was distributed. *Late work will not be accepted without previous agreement by the instructor*. Save your completed assignments as self-contained HTML files generated with RMarkdown. Name your homework files with the pattern *UWNetID\_HW\_n.html* where *UWNetID* is your UWNetID and *n* is the week number when it was assigned. For example, the first assignment by me would be named <u>phurvitz\_HW\_1.html</u>. Any files, including the assignment document, data files, or code files, should be uploaded using Canvas, <u>https://canvas.uw.edu/courses/1353992</u>.

# **Religious Accommodation**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy

(https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/).

Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (<u>https://registrar.washington.edu/students/religious-accommodations-request/</u>)

### **Conduct** (copied from UW web site)

The University of Washington Student Conduct Code (WAC 478-121) defines prohibited academic and behavioral conduct and describes how the University holds students accountable as they pursue their academic goals. Allegations of misconduct by students may be referred to the appropriate campus office for investigation and resolution. More information can be found online at <u>https://www.washington.edu/studentconduct/</u>.

## Access and Accommodations (copied from UW web site)

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or <u>uwdrs@uw.edu</u> or <u>disability.uw.edu</u>. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

## Academic Integrity (copied from UW web site)

The University takes academic integrity very seriously. Behaving with integrity is part of our responsibility to our shared learning community. If you are uncertain about if something is academic misconduct, ask me. I am willing to discuss questions you might have.

Acts of academic misconduct may include but are not limited to:

- Cheating (working collaboratively on quizzes/exams and discussion submissions, sharing answers and previewing quizzes/exams)
- Plagiarism (representing the work of others as your own without giving appropriate credit to the original author(s))
- Unauthorized collaboration (working with each other on assignments)

Concerns about these or other behaviors prohibited by the Student Conduct Code will be referred for investigation and adjudication by the office of the Dean of Arts and Sciences.

Students found to have engaged in academic misconduct may receive a zero on the assignment (or other possible outcome).

### **Safety** (copied from UW web site)

Call SafeCampus at 206-685-7233 anytime – no matter where you work or study – to anonymously discuss safety and well-being concerns for yourself or others. SafeCampus's team of caring professionals will provide individualized support, while discussing short- and long-term solutions and connecting you with additional resources when requested.