Course Syllabus

Instructor Information

Dr. Sarah Allred
Office: ATG 323
Lab meeting: Free period Thursday unless otherwise specified; Zoom until further notice (see link in Canvas)
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Course Overview

The independent study course provides experiential learning in research in a small group and individual environment, and I hope to share with you the fascination and love I have for data and the research process! In addition to (hopefully) providing you with a lot of fun, the data and research tools are useful for anyone wanting to learn more about research or prepare for graduate school. During the semester, you will participate in both the intellectual and practical components of research. For example, you will develop research questions, do literature searches to support the development of better research questions and methods, and search for relevant existing data. You will also learn practical things about processes of data organization and data sources and do some basic data entry. This semester (Spring 2022) is a transition semester for me as I re-enter research from several years in an administrative role. Thus, this semester will be largely devoted to a) exploring new research ideas; and b) data management (data entry, cleaning, and organization) for previously developed research projects.
Broad topics for Sp 22 (developed in more detail below include): **Risk and resilience in response to COVID-19; Municipality-level data for social determinants of health; Assessing the effect of family presence on multidisciplinary patient rounds; Social connections and health; Equity in health philanthropy and grantmaking; Voting pattern changes in New Jersey young adults.**

Course Requirements:

In order to involved in research in the lab during Spring 2022, you should be aware of the following requirements.

1. We will have lab meetings every week on **Thursday during the free period** unless otherwise indicated. Please set this hour aside and plan to attend meetings. You will receive points for attending lab meeting (this will also be listed on Canvas). You may also count this towards your weekly time commitment (1 hour). Lab meetings will be a time to learn new information, participate in research

design, read papers, present ideas and findings lab members, reflect on what you learned the previous week and plan your hours for the following week.

2. In order to earn 3 course credits, you are expected to complete about 9 hours of work per week. To get full points, you need to document 100 hours of work (*participation hours*) over the semester. This 100 hours amounts to giving you a couple of "free weeks". Each week during lab meeting you will make a plan for work to be done the following week. For the most part, you will have the independence to choose what work you want to do and what time you want to do it, but you will need to show responsibility for completing tasks that you commit to in a timely fashion (*quality of work)*. To document *participation hours* and *quality of work*, you will complete two brief assignments on Canvas each week (more details below).

3. In order to be involved in research in my lab, you will need to complete Human Subjects training completed via CITI (required by Rutgers IRB) BEFORE you begin working with data. To complete your training, go to this website. (https://research.rutgers.edu/researcher-support/research-compliance/research-integrity/collaborative-institutional-training). Go the section titled: "Using CITI". This will give you instructions on how to log in, how to add courses, and how to print the certificate that shows you completed your training. The two courses you need to complete are: (1) Biomedical / Clinical Research Investigators **Basic** and (2). Social & Behavioral Research **Basic.** You will need to complete your training by **February 1st.** The time spent doing this counts as your lab hours. If you have already completed the CITI training, you can just upload the certificate (assignment on Sakai).

4. You will be required to turn in a brief paper (approx. 2 pages) by the last day of class (May 2). The most common version students submit is a reflection about what was learned during the semester, but please contact me if you would like to write about something different than that.

Potential Research Projects

This semester (Spring 2022) is a transition semester for me as I re-enter research from several years in an administrative role. Thus, this semester will be largely devoted to a) exploring new research ideas; and b) data management (data entry, cleaning, and organization) for previously developed research projects.

1. **Risk and Resilience in Response to COVID-19:** Since early 2020, students at Rutgers-Camden's Senator Walter Rand Institute for Public Affairs (WRI) have been periodically recording COVID-19 cases and deaths at the municipality level in New Jersey. Several short papers have been published from data through Fall of 2020. This semester we will work on organizing and analyzing the data from 2021 and exploring how social determinants of health might predict why some communities in NJ fared especially well or especially poorly. (Collaboration with Dr. Emily Greenfield, School of Social Work, Rutgers-NB).

2. **Municipality-level data for social determinants of health:** Research has established the importance of social determinants of health (how the places we live, play, pray and work influence our health), and this data is readily available at the county level. Yet it is still surprisingly hard to get a

lot of this data at the municipality-level -- and this is the data level that is most useful for nonprofits or local governments looking to understand or make decisions about their communities. Even when data are available at the municipality-level, they are often available as single variables that can be difficult to integrate with other variables.   This project will work on aggregating municipality-level data in New Jersey into one common form that can be used for data analysis (and to share with others). This project will include locating publicly available data and putting it into the proper form as well as reaching out to partners across the state to ask them to share their own data with us. I have a preliminary data set that can be used as a starting point.

3. **Assessing the effect of family presence on multidisciplinary patient rounds**: This project is led by Dr. Brigitte Cypress in Nursing, and I am her co-PI (to do data analysis) on this project. Dr. Cypress has collected much data and we will be working on data entry of that data and how to conduct statistical tests to analyze the data.

4. **Social connections and health**: A main finding from the 2018 CHNAs was the relationship between social connections and health. Often, original research starts with a hypothesis and then designing a study to test the hypothesis. In this project, however, we will be brainstorming what research questions we can answer with several existing data sets. These data sets include: community health needs assessments data in 5 New Jersey counties, Emergency Department utilization data from these counties, COVID-19 case rates, and our municipality data set, as well as qualitative data from 2021/2 that asked residents of Southern New Jersey about the effect of COVID-19 on social isolation. What research questions can we answer with this data?

5. **Equity in health philanthropy and grantmaking** : Research has established disparities in both philanthropic giving and academic grantmaking. I am currently working on writing up a description of grantmaking initiatives I've worked on that tried novel structures to promote equity (RWJF Small Communities Forming Hyperlocal Data Collaboratives; Rutgers IRWG Community Design for Health and Wellness; Joint Board's South Jersey Institute for Population Health). These grantmaking initiatives have already been completed. Work on this project will involve literature reviews about disparities in grantmaking and, possibly, qualitative data collection about the impact of the completed initiatives.

6. **Voting pattern changes in New Jersey young adults:** Recently, a pilot programmed aimed at increasing voter turnout in young adults was completed in several New Jersey counties, and the organizers of the pilot project would like to know if voter turnout changed in these counties. In this project, we will organize publicly available voting data at the municipality level and look for trends over time.

Grading Overview

If you show up, participate, and do your work, you should get an A in this course. The reason for a formal grading scheme is to provide the "choice architecture" to support you showing up, participating and doing your work. Grades will be computed as follows, for a total of 280 pts:

Participation hours: 100 points

Quality of work: 100 points (13 weeks x 10 points, drop three lowest)

Attendance at lab meetings: 40 points (13 weeks x 4 points, drop three lowest)

Final paper: 20 points

Human subjects certification: 20 points

Grading details:

Participation hours and *quality of work* are turned in via separate assignments on Canvas. The weekly process should look like this.

(1) FIRST THURSDAY: Come to lab meeting on Thursday. Make a plan for work the following week. You can do this in whatever form you like, but I recommend writing a few words about what you plan to do (e.g. Email three people on Dr. Allred's data list; explore the COVID-19 data; read three articles; talk with labmates about what projects sound interesting) and when you plan to do it (Tuesday and Thursday afternoons).

(2) DURING EACH WEEK: Briefly note your hours as you work them. Keep track of the content you produce (e.g. if you read articles, the summaries of the articles).

(3) EVERY THURSDAY AFTER THE FIRST:

(a) Summarize your hours from the previous week (Thursday through Wednesday). **Turn this in on Canvas for your participation hours.** Submit this by the due date (end of the day Friday for the previous week's timesheet). If you fail to submit your hours for the week, you cannot submit them late. As time passes, students tend to inflate their hours. It is **your responsibility** to complete your required hours or contact me if you need additional work to do. You will receive as points the number of hours you worked that week. The total number of hours by the end of the semester should be 100 for full credit.

(b) Briefly summarize how the work you did compared to the work you planned to do from the previous week. **For your quality of work assignment, turn in** (a) your plan for the week that you wrote down last Thursday; (b) how your work compared with the plan; (c) anything you "produced" for the week (e.g. articles you read, summaries, additional data, etc). Please note that you can be as informal as you like-- bullet points, etc. Please be honest in (b). You can still receive full credit if your completed work is very different than your planned work, as long as you explain why. (For example, suppose your plan was to add two variables to the municipality data sheet, but you discovered that the data you wanted to add required significantly more cleaning than you anticipated). Submit this by the due date--same as the due date for the participation hours-- end of the day Friday for the previous week's work.

(c) Make a plan for the next week. You do not need to turn this in until you turn in the quality of work assignment.

Course Summary:

Date	Details	Due
Thu Jan 20, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting](https://rutgers.instructure.com/calendar?event_id=708754&include_contexts=course_174791)**	12:45pm to 1:45pm
	📝 **[Lab meeting attendance 1/20](https://rutgers.instructure.com/courses/174791/assignments/1895979)**	due by 11:59pm
Thu Jan 27, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting](https://rutgers.instructure.com/calendar?event_id=708755&include_contexts=course_174791)**	12:45pm to 1:45pm
	📝 **[Lab meeting attendance 1/27](https://rutgers.instructure.com/courses/174791/assignments/1895981)**	due by 11:59pm
Fri Jan 28, 2022	📝 **[Participation Hours Jan 20 - Jan 26](https://rutgers.instructure.com/courses/174791/assignments/1895980)**	due by 11:59pm
	📝 **[Quality of work Jan 20-Jan 26](https://rutgers.instructure.com/courses/174791/assignments/1895984)**	due by 11:59pm
Thu Feb 3, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting](https://rutgers.instructure.com/calendar?event_id=708756&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Feb 10, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting](https://rutgers.instructure.com/calendar?event_id=708757&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Feb 17, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting](https://rutgers.instructure.com/calendar?event_id=708758&include_contexts=course_174791)**	12:45pm to 1:45pm

Date	Details	Due
Thu Feb 24, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708759&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Mar 3, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708760&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Mar 10, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708761&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Mar 17, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708762&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Mar 24, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708763&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Mar 31, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708764&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Apr 7, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar? event_id=708765&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Apr 14, 2022	🗓 **2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting**	12:45pm to 1:45pm

Date	Details	Due
	[(https://rutgers.instructure.com/calendar?event_id=708766&include_contexts=course_174791)](https://rutgers.instructure.com/calendar?event_id=708766&include_contexts=course_174791)	
Thu Apr 21, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar?event_id=708767&include_contexts=course_174791)](https://rutgers.instructure.com/calendar?event_id=708767&include_contexts=course_174791)**	12:45pm to 1:45pm
Thu Apr 28, 2022	📅 **[2022SP - Independent Study with Dr. Allred - Weekly Lab Meeting (https://rutgers.instructure.com/calendar?event_id=708768&include_contexts=course_174791)](https://rutgers.instructure.com/calendar?event_id=708768&include_contexts=course_174791)**	12:45pm to 1:45pm