Arts & Sciences
Center for Innovation in Social Science

Fall 2023
HUB 290(A1) Social Science Research Fundamentals
Tuesdays 3:30-4:45 pm.
CISS 5th floor conference room (704 Commonwealth Ave)

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Introduction

"*Research is something that everyone can do and everyone ought to do. It is simply collecting information and thinking systematically about it.*"
- Raewyn Connell, Australian sociologist

In today's fast moving information age, individuals often must find and critically engage with information and data from multiple sources (e.g., social media, news outlets, scholarly journals, etc.). The Center for Innovation in Social Science (CISS) is dedicated to training future generations of information-literate undergraduate students, who can engage in rigorous social science research and exploration. To further this mission, the Center developed a CISS Undergraduate Research Intern Program in which undergraduates work alongside a faculty mentor to conduct social science research for approximately 113 hours, during the fall and spring semesters. Center co-curricular programming will run parallel to the student intern's individual research projects, helping the interns to acquire and hone their skills as both a producer and consumer of research findings. Students who are carrying out other independent or mentored research, through programs like departmental honors or UROP also are eligible to participate, with permission of the instructor (carrds@bu.edu). *Participation in this co-curricular is unpaid*; the 45 hours of class participation are not included in the 113 paid hours performed as part of one's mentored research intern duties. Students are strongly encouraged to also enroll in the Spring 2024 semester, which continues their progress toward independent research.

Course Objectives
1. To identify, understand, and use publicly available research tools and search platforms at Boston University for carrying out literature searches that are the foundation of a systematic literature review.
2. To identify, understand, and use publicly available databases and data resources that can be used for both statistical analysis or to support substantive claims in one's writing.
3. To learn how to evaluate the quality and credibility of information sources, identify gaps in the research that require further investigation, develop a research plan to collect data, execute that research plan (following a scientific process, learning when to modify their proposed research plan), describe the results in a professional manner, and present their research findings in paper, poster, or oral presentation format(s). These goals are based

on the Society of College, National, and University Libraries UK (SCONUL)'s <u>seven pillars of information literacy</u> (1999, updated 2011).
4. To learn about the hallmarks of ethical research practice, including the preparation of an application to the <u>BU IRB</u> (institutional review board).
5. Students will learn how to present their research to a general audience and engage in science/research communication at Boston University and via social media at a final research presentation during the Spring semester.

Hub Units

Hub co-curriculars are ungraded, 0-credit experiences offered by the BU Hub that combine activities, discussion, and reflection. This course fulfills the Hub Research and Information Literacy (RIL) unit, a component of the Intellectual Toolkit. We will achieve the following learning outcomes.

1. Students will be able to search for, select, and use a range of publicly available and social science-specific information sources ethically and strategically to address the core questions of their mentored research project.

2. Students will demonstrate understanding of the overall research process and its component parts. The course will guide the student as they and their mentor formulate compelling and relevant research questions or hypotheses, gather and analyze information, and critique, interpret, and communicate findings in both academic and popular forums.

Prerequisites/Corequisite
Students participating in this co-curricular experience are required to be enrolled as a full-time student (12 or more credits) during the fall and spring semesters, in addition to participating in the CISS Undergraduate Research Intern Program or another independent or supervised research experience (pending approval from course instructor).

Release & Waiver Request
CISS will seek photographic and information releases from students and mentors when creating social media content as appropriate.

Course Components

15 hours of targeted time and an additional 30 add to the experience.

<u>**Annotated Bibliography**</u>- Students will work with Center staff, a BU librarian, and their research mentor to develop an annotated bibliography focused on their research topic. This annotated bibliography will allow them to engage with current research and credible, high-quality sources in their field. For each entry in the bibliography, the student will briefly describe the author(s)' argument and why this source is relevant to their specific research question, and will discuss any ethical issues with the information or using the information if applicable. The students will also include a list of the most prominent or widely respected three to five peer-review journals in their academic field (or subfield), a list of three to five influential scholars in

their field (or subfield), and two or more key arguments surrounding their research topic (including one or more countervailing views). They will submit this to their mentor and Center staff for feedback. (Estimated Completion Time = 15 hours)

Annotated Bibliography Reflection - Students will write a reflection (around three pages) that describes what they learned while developing their annotated bibliography, including (i) tips and tricks they have for evaluating if a source is credible; (ii) publicly available (or accessible via BU) resources that were helpful to them in carrying out their literature search, (iii) how their understanding of using and evaluating information sources has changed throughout the process of writing the bibliography, (iv) how they plan on using the information, (v) how the information they found supported or contradicted their research hypothesis, (vi) how this process allowed them to be more strategic and focused when collecting information sources to answer a set research question, etc. In a class meeting, students will present their reflections to one another in small groups, coming together for a larger conversation on how to identify and evaluate information sources ethically and strategically. (Estimated Completion Time = 2 hours)

Research Diary - Students will submit a one-page research reflection each month. Students will discuss the information sources they are engaging with, how they are critiquing those information sources, any research challenges they have faced, any new information they have found and how their research plan has been adjusted in response to obstacles or unexpected problems. Students will also reflect on how their research progress has allowed them to build research and information literacy skills, and honed their knowledge and use of social science research methods. (Estimated Completion Time = 5 hours)

Group Meetings - As a part of this co-curricular activity, students will attend several presentations and group meetings. These meetings will help build research skills. Longer descriptions of each meeting can be found in the calendar below. Twice a month during group meetings, students will present a brief research update (drawing on their research diary). (Estimated Completion Time = 15 hours)

CISS Undergraduate Research Showcase - Abstract submission and presentation at CISS Undergraduate research showcase in April 2024 (Estimated Completion Time = 10 hours; nine hours preparation and one hour present).

Research Communication via Social Media - Social media usage is on the rise, and it is increasingly becoming where people find their news. Similarly, scholars often use social media platforms to share their published research with general and academic audiences. In this co-curricular activity, students will use social media to disseminate their research findings. Students can craft a tweet (with infographics), Instagram post, Instagram reel, or TikTok that summarizes their research findings and implications (with links to resources). With the permission of the student and the mentor, CISS will share this content via the Center website, weekly digest, or social media platforms. (Estimated Completion Time = 3 Hours)

Final Reflection - In a final three-page reflection, students will summarize their research progress to date, describing how they approached their literature review, found the gaps in the current literature, developed a research plan with their mentor, executed (and adjusted) the

research plan, collected and/or analyzed data, ethically carried out the collection and analysis of data and how they felt that they presented their findings at the CISS Undergraduate Research Showcase. Students will also discuss how they have developed as researchers over the course of the one-year program and the tips and tricks they would tell other students looking to conduct research in their field. (Estimated Completion Time = 2 Hours)

Tentative Schedule

During the 2023-24 academic year, the class will meet on Tuesdays 3:30-4:45 p.m.

October 10, 2023 - Welcome to the Program, Student-Mentor Relationship, and Program Expectations (1 Hour)
Interns, mentors and CISS staff will meet at the Center. CISS staff and mentors will discuss the program expectations and provide an overview of the program structure, goals, and benchmarks. Students will meet one another, tour the Center, and learn how they can reserve Center space for small group meetings.

October 17, 2023 - Time Management, Research Organization, and Reference Management (1 Hour)
Time management and research organization are essential to success in academia. Participants will share tips for organizing their research project and staying in communication with their mentor in a timely fashion. We will also discuss how to talk to one's mentor about how to report progress, how to best work with one another, and how to discuss what to prioritize when given more than one task.

October 24, 2023 - Drawing on BU Resources (1 Hour)
A guest lecture presented by Ashley Jester (Associate University Librarian for Research and Learning at BU Libraries) will discuss (a) how to develop a Boolean search sequence, (b) how to use library resources (i.e., library search, inter-library loan, library databases), (c) the difference between peer-reviewed and non-peer-reviewed publications, (d) how to conduct a systematic literature review, (e) when to use Google Scholar versus library subscription databases, etc. This meeting provides the foundation for the annotated bibliography project.

November 14, 2023 -Data Resources 101 (1 Hour)
Professor Carr will discuss how researchers can access secondary data sources, or those data sources collected by other scholars and then made available for the larger research community via platforms like ICPSR at University of Michigan. These data sources might include large national surveys, historical documents, or other secondary sources. The students will then work in small groups to find a data source that addresses an aspect of their research questions and describe what they found and how it can assist their research (either now or in the future).

November 28, 2023 - Research Program Meeting (1 Hour)
Students and mentors will meet to share their research progress to date, including how their research and the information they are gathering either support or challenge their original hypothesis/thesis and how they are engaging with the information sources (learning how to

establish if a source is credible, respected by those in the field, if a researcher ethically conducted their research, etc.). Some sample reflection questions include:

- What was your original hypothesis or research question? What have prior published studies found on this topic?
- What are some of the guiding theoretical frameworks or paradigms guiding your work? Which one do you find more relevant or persuasive? Why?
- What is something that you are learning by conducting research that might be applied to policy, practice, or some other "real world" translation?
- Has this research shaped how you read, interpret, or critique information that you encounter in other platforms, such as social media, news, or your textbooks?
- What is a research barrier you have faced? How have you worked with your mentor to "solve" it? What core lesson did you learn in doing this?
- Discuss an exciting research finding or research paper that you have recently read. Why was this interesting or surprising? How did it change your concept of your project or conducting research more generally?
- What stages of the research process have you completed or are you engaged in? What have you learned from each stage, and what do you hope to learn from future stages?

December 12, 2023 - Research as a Springboard (1 Hour)
Research teaches students critical skills that will serve them in graduate school and/or the workforce. CISS will partner with the Center for Career Development to review students' resumes and prepare them to apply for summer internships, full-time employment, and/or graduate school.

WINTER BREAK - **Annotated bibliography due on the first day of classes

Tentative Spring 2024 Dates

January 24, 2024 - Presenting Research 101 (Research Communication) (1 Hour)
Center staff will present on how to a) write an abstract, (b) prepare a research poster, and (c) present their research findings to members of the BU community (including peers, faculty, and administrators). Students will also learn about research/science communication and how they can effectively communicate their research to a wider audience (via social media).

January 31, 2024 - What Is Innovation? How Can an Entrepreneurial Mindset Help Me? (1 Hour)
Students will participate in an informal discussion with the BUild Lab executive director, and will present their research, and their classmates will discuss how their research could lead to innovations in the future. Li Liang will present on BUild programming to show students how they can draw on BU resources to make that innovation happen.

February 7 and 21, 2024; March 6 and 20, 2024 - Research Program Meetings and Reflection (1 Hour)
In a group meeting (without their mentors), students will summarize their research project to date, including how their research and the information they are gathering are either supporting or refuting their original hypothesis/thesis and how they are engaging with the information sources

(learning how to establish if a source is credible, respected by those in the field, if a researcher ethically conducted their research, etc.). Some sample reflection questions include:
- What was your original hypothesis or research question? What have prior published studies found on this topic?
- What are some of the guiding theoretical frameworks or paradigms guiding your work? Which one do you find more relevant or persuasive? Why?
- What is something that you are learning by conducting research that might be applied to policy, practice, or some other "real world" translation?
- Has this research shaped how you read, interpret, or critique information that you encounter in other platforms, such as social media, news, or your textbooks?
- What is a research barrier you have faced? How have you worked with your mentor to "solve" it? What core lesson did you learn in doing this?
- Discuss an exciting research finding or research paper that you have recently read. Why was this interesting or surprising? How did it change your concept of your project or conducting research more generally?
- What stages of the research process have you completed or are you engaged in? What have you learned from each stage, and what do you hope to learn from future stages?

April 24, 2024 – Initial Practice for CISS Undergraduate Research Showcase (1 Hour)
Students will practice their research showcase presentation in front of CISS staff, program mentors, and other faculty and students as appropriate. During this time, students will give and receive individualized feedback that they can work into their upcoming presentation.

FRIDAY April 26, 2024 - CISS Undergraduate Research Showcase (half- or full-day event, depending on cohort size)
Students will present their research to members of the BU community, including their peer researchers, mentors, Center staff, and members of the public. Each presentation will last for 15-18 minutes, including Q&A with the audience. Interns are encouraged to invite friends and family. Refreshments will be served.

Structured final reflection due on April 30, 2024