<table>
<thead>
<tr>
<th><strong>Course title:</strong></th>
<th>Data Visualization</th>
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<tbody>
<tr>
<td><strong>Course #/term:</strong></td>
<td>672, 001, Spring/Summer, 2021</td>
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<tr>
<td><strong>Time and place:</strong></td>
<td>Monday, 8-Noon, Online</td>
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<td><strong>Credit hours:</strong></td>
<td>3</td>
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<td><strong>Instructor:</strong></td>
<td>Brian Perron, PhD</td>
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<td><strong>Pronouns:</strong></td>
<td>he, his, him</td>
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<tr>
<td><strong>Office:</strong></td>
<td>Online</td>
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<td><strong>Office hours:</strong></td>
<td>By appointment</td>
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1. Course Statement

a. Course description

In an era of evidence based practice, community workers, advocates, and evaluators will likely find that they need to interpret and visualize data from a wide variety of sources. Understanding, interpreting and visualizing data can make the difference in successfully or unsuccessfully advocating for communities, clients or programs, and for understanding the impact of programs on clients. Increasingly, data relevant to community, participant and client well-being are available from a broad range of sources, whether those be databases of volunteers and donors, the Census, the World Bank, in addition to many others. This section of SW 672 will be focused on the acquisition of concrete applicable skills and strategies for interpreting and visualizing community data, including learning in R, Tableau and QGIS.

b. Course content

Students will learn some of the major analytic and quantitative tools used by practitioners in assessing or evaluating human service programs or systems, which include a range of specific programs. The theme of this course is how to increase the rationality of the planning, analysis, and evaluation process, particularly of programs intended to serve the underprivileged or oppressed populations. Students will learn that human service organizations include a wide variety of programs of diverse size and complexity, with respect to their activities and goals. This course will impart skills which can be applied at various levels of analysis in different contexts.

c. Course objectives and competencies

Upon completion of the course, students will be able to:
1) Demonstrate beginning level competence in the use of some major analytical tools that are most commonly used to assess and evaluate complex systems of services.
2) Demonstrate in-depth knowledge of two analytical tools and their application in the human services field.
3) Identify the limitations of rational analysis and be able to determine when rational choice processes are desirable and feasible to use.
4) Discuss typical ethical concerns related to the use of analytic methods in social policy practice. Describe ways in which diversity dimensions such as "ability, age, class, color, culture, ethnicity, family structure, gender (including gender identity and gender expression), marital status, national origin, race, religion or spirituality, sex, and sexual orientation, as well community of residence" have an effect on the analytical tools that are most commonly used to assess and evaluate complex systems of services.
d. Course design

The instructor will use lecture and discussion with students working in teams on contemporary issues. In addition, the instructor will include participatory discussion, written assignments and experiential exercises related to course materials.

e. Curricular themes

- Multiculturalism and Diversity: Students will develop the capacity to identify ways in which diversity dimensions such as "ability, age, class, color, culture, ethnicity, family structure, gender (including gender identity and gender expression), marital status, national origin, race, religion or spirituality, sex, and sexual orientation, as well community of residence" and other forms of social stratification and disenfranchisement influence and are impacted by the social policy practice process.
- Social Justice and Social Change: This course will provide students with the capacity to participate in the social policy process and the ability to approach policy analytically by virtue of social work practice and ethics. Students will learn that social work practice and ethics play an important role in shaping the outcome of ongoing policy debates to reflect issues in social justice and change.
- Promotion, Prevention, Treatment, and Rehabilitation: Students will learn that policies in human services are too often implemented in reaction to an issue, not proactively, due to changing social, economic, and political circumstances and influences. Promotion, prevention, treatment, and rehabilitation activities are difficult to evaluate and therefore raise special challenges in social policy implementation. Students will be exposed to innovative evaluation techniques (e.g., forecasting and simulation models) that can be used to analyze and evaluate promotion, prevention, treatment, and rehabilitation activities prior to the development, implementation, and analysis of any relevant policy issue or initiative.
- Behavioral and Social Science Research: Policies in human services are in a constant state of flux owing to changing social, economic, and political circumstances. Thus, any review of existing policy may be quickly outdated and has limited use as part of the training social work students carry into their careers. Therefore, students will be provided with social science models and theories that can be used as tools to analyze and evaluate any policy issue encountered in the course of their professional activities. Examples of the use of social science in policy development will be presented (e.g. Coleman report on education).

f. Relationship to social work ethics and values

Ethical standards of social work practice (e.g. possibly NASW Code of Ethics) and evaluation practice (Program Evaluation Standards) will be used to review issues commonly confronted in evaluation practice. The ethical themes of autonomy, beneficence, nonmaleficence, fidelity, and justice will be particularly emphasized and discussed.
2. Class Requirements

a. Text and class materials
   All class materials are posted on CANVAS

b. Class schedule
   The class schedule will follow the Spring / Summer academic calendar (2021)

c. Assignments
   All class assignments are posted on CANVAS
d. Grading

The evaluative strategy for this course follows an academic model that is referred to as *upgrading*. Students in this course will not receive points or letter grades on individual submissions. Instead, the instructor will be providing feedback on your work in context of your broader learning goals. The final grades will be given based on a negotiation and discussion of the instructor that includes a comprehensive review of process evidence and assignment submissions, taking into account the following dimensions of consistency of engagement, quality of work, and quantity of work.

**Consistency of engagement**

Engagement refers to being actively involved in the course through active participation in all aspects of the course and course materials, with an active emphasis on integrating course materials into all learning activities. Thus, students are expected to document their learning on an ongoing basis. Retrospective documentation of engagement cannot be used to provide evidence of consistent engagement. The “version history” will be used to examine the consistency of engagement over time.

**Quality of work**

Students are expected to produce and submit high-quality work. Some activities require the work to be *technically* correct. Other activities require thoughtful consideration on a number of different decisions. Written activities should reflect graduate-level writing skills that are organized, carefully edited, and sufficiently developed. Students should be sure to read and carefully follow instructions for the various activities.

**Amount of work**

In order to develop knowledge and skills, a given amount of time must be invested. This learning journal is not meant to be a *timesheet* of your work. Rather, the amount of work you have completed can be inferred from your consistency of engagement and the quality of work you produce. The Associated Dean for Educational Programs at the SSW provided the policy for the Spring/Summer 2021 semester.

The United States Department of Education requires that academic institutions develop a written credit hour policy that conforms to the definition of a credit hour. More recently the University of Michigan has instructed us that our School must create such a policy. The School of Social Work definition of a credit hour formalizes compliance with federal expectations and assists with consistency through the School of Social Work. As such, the School of Social Work utilizes a ratio of one hour of classroom instruction to two hours of out-of-class activity. Specifically:

- One credit is equal to approximately 45 hours of total work over the semester.
- Three credits is equal to approximately 135 hours of total work over the semester.

Please note that the currently scheduled amount of class time is 4 hours. Thus, a total of 12 hours of effort on a weekly basis is the expected amount of work for this course. Because this is an online course with both synchronous and asynchronous content, we will have shortened class sessions. However, the expected amount of work remains the same.
This semester will be divided into three blocks. Students will perform a self-evaluation of their efforts at the end of each block, assigning a letter grade for each of the major dimensions, along with an overall block grade. This grade should be made in the context of their expressed learning goals. The instructor will also independently assign a letter grade.

If you have a disability or condition that may interfere with your participation in this course, please schedule a private appointment with me as soon as possible to discuss accommodations for your specific needs. This information will be kept strictly confidential. For more information and resources, please contact the Services for Students with Disabilities Office at G664 Haven Hall, (734) 763-3000.

- Religious/spiritual observances
- Military deployment
- Writing skills and expectations
- Academic integrity and plagiarism