1. **Course Description:**

This course will provide content on the logic of inquiry and the necessity for an empirical approach to practice. The process of formulating appropriate research questions and hypotheses, techniques for testing relationships and patterns among variables, methods of data collection, methods to assess and improve the validity and reliability of data and measures, and the ethics of scientific inquiry will be addressed. This course will help students understand practice through the critical examination of methods associated with decision-making, critical thinking, and ethical judgment. The course content will integrate the core themes related to multiculturalism and diversity; social justice and social change; promotion, prevention, treatment, and rehabilitation; and behavioral and social science research.

2. **Course Content and Course Design:**

This course will cover quantitative and qualitative research methods, commonly used statistical procedures, and approaches to the evaluation of practice. Students will learn how to understand and appreciate a scientific approach to building practice knowledge and for evaluating practice, and to use research to advocate for clients and inform policy. Special emphasis will be placed on increasing one's ability to formulate research questions, apply research methods, conduct statistical analysis, and interpret research reports. The latest statistical, graphical, and display technologies will be used.

Many different methods will be used for acquiring knowledge and skills including: discussion, lectures, projects, exercises, and lab work. This course is designed to increase students' comfort level with research methods and statistical analyses and to increase their appreciation of the relevance of research and evaluation for social work practice.
3. **Course Competencies and Practice Behaviors:**

   This course addresses the following competencies and practice behaviors:

**COMPETENCY 2—Apply social work ethical principles to guide professional practice.**
Social workers have an obligation to conduct themselves ethically and to engage in ethical decision-making. Social workers are knowledgeable about the value base of the profession, its ethical standards, and relevant law. Social workers:

2.1 Recognize and manage personal values in a way that allows professional values to guide practice;
2.4 Apply strategies of ethical reasoning to arrive at principled decisions.

**COMPETENCY 3—Apply critical thinking to inform and communicate professional judgments.**
Social workers are knowledgeable about the principles of logic, scientific inquiry, and reasoned discernment. They use critical thinking augmented by creativity and curiosity. Critical thinking also requires the synthesis and communication of relevant information. Social workers:

3.1 Distinguish, appraise, and integrate multiple sources of knowledge, including research-based knowledge, and practice wisdom;
3.2 Analyze models of assessment, prevention, intervention, and evaluation; and

**COMPETENCY 4—Engage diversity and difference in practice.**
Social workers understand how diversity characterizes and shapes the human experience and is critical to the formation of identity. The dimensions of diversity are understood as the intersectionality of multiple factors including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation. Social workers appreciate that, as a consequence of difference, a person’s life experiences may include oppression, poverty, marginalization, and alienation as well as privilege, power, and acclaim. Social workers:

4.1 Recognize the extent to which a culture’s structures and values may oppress, marginalize, alienate, or create or enhance privilege and power;
4.3 Recognize and communicate their understanding of the importance of difference in shaping life experiences;

**COMPETENCY 6—Engage in research-informed practice and practice-informed research.**
Social workers use practice experience to inform research, employ evidence-based interventions, evaluate their own practice, and use research findings to improve practice, policy, and social service delivery. Social workers comprehend quantitative and qualitative research and understand scientific and ethical approaches to building knowledge. Social workers:

6.1 Use practice experience to inform scientific inquiry and
6.2 Use research evidence to inform practice.

**COMPETENCY 7—Apply knowledge of human behavior and the social environment.**
Social workers are knowledgeable about human behavior across the life course; the range of social systems in which people live; and the ways social systems promote or deter people in maintaining or achieving health and well-being. Social workers apply theories and knowledge from the liberal arts to understand biological, social, cultural, psychological, and spiritual development. Social workers:
7.2 Critique and apply knowledge to understand person and environment.

COMPETENCY 10—Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities. Professional practice involves the dynamic and interactive processes of engagement, assessment, intervention, and evaluation at multiple levels. Social workers have the knowledge and skills to practice with individuals, families, groups, organizations, and communities. Practice knowledge includes identifying, analyzing, and implementing evidence-based interventions designed to achieve client goals; using research and technological advances; evaluating program outcomes and practice effectiveness; developing, analyzing, advocating, and providing leadership for policies and services; and promoting social and economic justice.

COMPETENCY 10(b)—Assessment. Social workers:
10.b.4 select appropriate intervention strategies.

COMPETENCY 10(d)—Evaluation. Social workers:
10.d.1 critically analyze, monitor, and evaluate interventions.

4. Course Objectives:

Upon completion of the course, students will be able to:

1. Act as a critical consumer and contributor of the design, methodology, and conclusions of social work and social and behavioral science research publications.
   a. Understand research concepts to permit a critical analysis of research and evaluation studies with respect to quality, bias, ethics, and potential applications.
   b. Assess the strengths and weaknesses of selected research designs and methodology, and of selected measures and measurement strategies.
   c. Assess the cultural sensitivity of measures and measurement strategies.
   d. Assess the biases and implications of conclusions drawn in the research studies.
   (Practice Behaviors 3.1, 3.2, 6.1)

2. Locate, assess and critique research studies so as to draw appropriate inference, particularly as it affects diverse populations at risk (dimension: 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).
   a. Frame research questions and develop problem statements that reflect the issues under consideration.
   b. Apply research concepts and principles in the development and use of selected qualitative and quantitative methodologies and analytical approaches.
   c. Choose appropriate research designs and methodology given a particular research question.
   d. Demonstrate the ability to select culturally appropriate measures and measurement strategies given specific populations.
   e. Construct simple indices, questionnaires, and measures relevant to the evaluation of practice.
   f. Conduct selected analytic and statistical procedures
   g. Demonstrate the ability to interpret and draw conclusions from selected analytic and statistical procedures.
   (Practice Behaviors 3.1, 3.2, 4.1, 4.3, 6.1, 6.2, 7.2, 11.4, 13.1)
3. Know the NASW Code of Ethics and appropriately apply it in the conduct of social work research.
   a. Understand ethical issues in the conduct of research and evaluation.
   b. Understand the relevance and applicability of research in working with disadvantaged, disenfranchised, and diverse populations at risk: (dimension: 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.
   c. Examine the processes by which research and evaluation findings can be used to enhance social justice, social change, promotion, prevention, treatment, and rehabilitation.
   (Practice Behaviors 2.1, 2.4, 7.2, 13.1)

5. Relationship of this Course to Curricular Themes:

| Theme Relation to Multiculturalism & Diversity: | This course will include material on methods to improve the cultural inclusiveness and cultural sensitivity of research methods. This content will cover culturally sensitive measures, inclusion of diverse groups of adequate size in sampling, culturally aware interpretations of data, and culturally responsible dissemination of results. The basic purpose of research and practice evaluation will also be analyzed from culturally bound perspectives. Students will gain an understanding of the ways in which research and evaluation have sometimes been used against oppressed groups, for example through unethical practices, distortion of results, or fabrication of data. |
| Theme Relation to Social Justice: | Examples will be given of ways in which research can be used to empower socially disadvantaged individuals, groups, and communities. These examples will include studies in which the research participants were involved in the study during all of its stages. |
| Theme Relation to Promotion, Prevention, Treatment & Rehabilitation: | Studies reviewed in the course will include examination of projects aimed at enhancing well-being and preventing problems. The methodological and ethical problems unique to studies of promotion and prevention efforts will be described. The social work values consistent with promotion/prevention research will be analyzed. |
| Theme Relation to Behavioral and Social Science Research: | The unique challenges in applying social science knowledge and methods to social work settings will be covered. These challenges include the practical and ethical dilemmas of applied research. Emphasis will be placed on the way established theories and methods influence the selection of research questions and methods. Studies will be critiqued for their ability to advance social science theory and knowledge and to improve social work practice. |
| Relationship to SW Ethics and Values: | The research and evaluation section of the NASW Code of Ethics and other professional codes will be applied throughout this course. Examples of common ethical dilemmas will be presented. Among the areas of ethics to be covered will be informed consent procedures, protection of research participants from harm, confidentiality, and accurate reporting of results. Emphasis will also be placed on the social workers' ethical obligation to use scientifically sound practice and to continually evaluate practice and programs. |
6. **Required Text and Software:**


**Optional:**


Students are expected to read the assigned readings *prior* to class. Additional readings and electronic materials are assigned throughout the term. These are available on CTools by week. CTools also provides information also for additional references and resources (in “Help” files).

We will use statistical software during a required computer lab assignment and optional statistics assignment. Purchase of a statistical program is *not* required for the purpose of this course. Access is also available in various labs on campus.

7. **Course Design**

The final grade comprises of several domains:

**Quizzes** (10 points)
There will be a total of 3 Quizzes throughout the semester. The lowest grade of the 3 quizzes will be dropped. Each quiz covers non-cumulative content which includes the session prior to the quiz (but does not include the readings for the day of the quiz). The quizzes will be in multiple-choice, short answer, and true-false format and will be given in the first half hour of class (6:10-6:40pm). If you do not take the quiz, the instructor will assume that you have opted to drop this quiz score. A list of “fair game” topics will be emailed by the instructor (and uploaded on the course calendar) by 5:00pm the Friday before each quiz.

**Written Assignments and Final Paper** (50 points total)
There will be three written assignments required in the course in addition to a final, cumulative paper. They are designed to be cumulative in the sense that each builds on the previous one, and all of them will be components of your final paper/proposal. In each written assignment, standard margins and font size (1” margins, double-spaced, APA style, *Times New Roman* 12 point font) is required. *The Craft of Research* and Chapter 15 of the text is a particularly helpful guide through this process. The instructions for each assignment are described on Page 8 of the syllabus.

**Peer Feedback / Evaluation** (10 points)
You should partner with at least one other student in the class. It is not required that you have the similar topic or a similar approach toward data analysis. Throughout the semester, it is expected that you will meet with your partner *outside of class time* (either in-person or electronically) to discuss each written paper assignment. If possible, also come to office hours and meet with the instructor together. There will be some opportunities during class to discuss the assignments (such as conceptualization of the problem, etc.) with your partner or in groups. Peer feedback (both giving and receiving) is a strong predictor of success in this class. **Please upload all of your feedback upon completion to CTools under “Assignments”**.
All papers should be submitted to your peer on Friday before the paper is due (or mutually-agreed upon) to enable your peer to consider feedback. Peer feedback for the final submission should be provided to the Peer at least one week prior to the submission of the final assignment. Feedback should be more than superficial grammatical suggestions and should instead provide thoughtful feedback that will help with project development. Please save all Feedback provided to your peer for each of the papers. The feedback should be uploaded to Assignments (on CTools) after you send it off to your Peer(s). At the end of the semester, each student will fill out an evaluation of their peer’s feedback over the course of the semester. Throughout the semester, you are welcome to ask the Professor for suggestions about Peer Feedback during class or office hours.

Your peer feedback grade is assessed based on (a) your peer’s evaluation and (b) the instructor’s assessment of the depth/quality of feedback provided for Papers 2, 3, and the Final Paper. Peer feedback receiving an “A” will go well beyond typographical and stylistic suggestions, providing dialogue and feedback on strategies for meeting the goals of each assignment and project development. The final evaluation and the instructor’s review of paper feedback will be part of each student’s final grade (5 points each for a total of 10 points).

Statistics Lab Assignment (5 points)
A Stats Lab/Module will be provided in class on 4/1. You will receive full credit by uploading a document going through the module on CTools “Assignments” by 4/15. For those of you who have experience in SPSS or Stata datasets and feel you do not need this module, please contact me.

Research Methods Assignment (5 points)
You are responsible for completing 1 of 3 options for a Research Methods Assignment. Hard copies are due to the instructor by 4/15. Further detail on this assignment and the options is provided on the last page of the syllabus.

Attendance, Participation, and Reflection (20 points total)
All students are expected to arrive on time and stay throughout all class sessions. If you are unable to attend a particular class for some reason, please take responsibility to update yourself by (a) doing the assigned reading, (b) studying the lecture notes on CTools, (c) asking other students to fill you in, and (d) reviewing material taught prior to your absence and making sure you master them well. I strongly encourage you not to miss any class session as the materials are connected. You will learn more if you participate; therefore, you will be expected to be engaged during all class lectures, discussions, and activities. Full attendance and participation will be rewarded when calculating the final grade.

Part of your attendance and participation grade is a short presentation in class to discuss your paper project. The presentation should be about 5 minutes in length and an additional 5 minutes are allotted for questions and answers. This is relatively informal and should be done without PowerPoint slides and handouts. Full credit is provided upon completion of the presentation.

Part of your attendance and participation grade is completing a 1-page reflection paper (non-graded) that briefly describes how any (minimum 1, maximum 3) concepts or methods learned in this course could influence your future social work practice, policy work, or community organizing strategies. This is due the last day of class. Please bring one copy to hand in during the last session. Full credit is provided upon completion of the assignment.
8. Grading Criteria for Assignments (please note grades are rounded up or down at 0.5 levels)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+</td>
<td>The grade of A+ will rarely be used and, in general, students should not expect to receive this grade on an assignment. This grade signifies work that goes beyond the content of the course and the expertise students are expected to master. An A+ is rare to obtain but not impossible.</td>
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<tr>
<td>A or A-</td>
<td>The grade of A is used for assignments that demonstrate excellence. These grades are reserved for student work which not only demonstrates excellent mastery of content but which also shows that the student has undertaken a complex task, has applied critical thinking skills to the assignment, and/or has demonstrated creativity in his or her approach to the assignment. The difference between these two grades is determined by the degree to which these skills have been demonstrated by the student.</td>
</tr>
<tr>
<td>B+</td>
<td>A grade of B+ is given to work determined to be very good. This grade denotes that a student has demonstrated a more-than-competent understanding of the material.</td>
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<tr>
<td>B</td>
<td>A “B” grade is given to student work meeting the basic requirements of the assignment. It denotes that the student has done adequate work and meets basic course expectations.</td>
</tr>
<tr>
<td>B-</td>
<td>The grade of “B-“ denotes that a student’s performance was less than adequate on an assignment, reflecting only a moderate grasp of expectations and/or content.</td>
</tr>
<tr>
<td>C+</td>
<td>A grade of C reflects a minimal grasp of the assignment, poor organization of ideas and/or several significant areas requiring improvement.</td>
</tr>
<tr>
<td>C</td>
<td>Grades between D+ and F are reflect a failure to meet the minimum standards, reflecting serious deficiencies in all aspects of performance on the assignment.</td>
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<tr>
<td>C-</td>
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<tr>
<td>D+ to F</td>
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<td>(below 70)</td>
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Summary of Written Assignments and Grading

- Quizzes 10%
- Written Assignments (3) 25%
- Final Paper 25%
- Peer Feedback / Evaluation 10%
- Statistical Lab Assignment 5%
- Assignment for Research Methods 5%
- Attendance and Participation 20%

(100% total course grade)

9. Additional Course Details:

Accommodations / Special Needs
If you have a disability or impairment that requires an accommodation, please contact the instructor in the first two weeks of class to discuss what modifications are necessary. Any information you provide will be treated as private and confidential. For more information and resources, please contact the Services for Students with Disabilities office at G664 Haven Hall (734-763-3000).
Assignment Submissions and Late Work

All assignments should be submitted to the Professor prior to the start of class on the due date. Electronic versions are preferred (as an email attachment) to allow for electronic feedback. All students are expected to submit their work in accordance with the deadlines. To be fair, I have adopted the following policy: Late work will be graded down by 10 points out of 100 for (or ‘into’) each day it is late unless prior arrangements for an extension have been made with me. Assignments are due at the beginning of class. An example of this policy is if the student turns in the assignment after class, in which case the original grade (let’s say 92%) would instead be 82%, and so on. Extenuating circumstances may arise which make it difficult to turn in work on time. In such cases, I expect you to communicate prior to the deadline that an extension is needed so a mutually agreeable extension can be made.

Academic Honesty

Plagiarism on an assignment in this course will result in a “0” for that assignment. Policies governing plagiarism can be found in the 2011-2012 Student Guide. Plagiarism is taken very seriously at the University of Michigan and is grounds for expulsion from the University. It is the student’s responsibility to become familiar with the information presented at: http://www.rackham.umich.edu/policies/academic_and_professional_integrity/.

Availability and Contact

The best way to reach me is via email. Please place “SW522” in the subject line. Please address the email in a formal manner and note that—due to the nature of my work—I am not able to check my email every day, and therefore, I might not be able to respond to your email right away. However, I will try my best to respond to your email within 48 hours of receipt.

I am available to meet with students outside of the classroom. Students are encouraged to meet with me during arranged times to 1) ask questions about course material or assignments, 2) review graded work, 3) obtain suggestions for additional reading, and 4) discuss other topics related to the course or to social work research in general.

Cell phones/PDAs/Laptops

I expect that students will turn off or mute (not “vibrate”) any cell phones, and will not respond to text messages or calls during class. These can be used during the break or after class. Use of laptops is acceptable in class, as I recognize that some students take notes more efficiently using laptops or have purchased electronic versions of the text. Use of laptops for non-course related activities (i.e. web surfing, online shopping, emails, facebook) is distracting to yourself, fellow students, and to the instructor. Engaging in such activity will adversely affect your participation grade in this course.

Grades

I feel that honest and constructive feedback will serve you better in the long term than false praise and reward. Further, I will explain my grading clearly and document explanations. If you ever have a question regarding a grade you receive, you are welcome to come by and discuss the grade with me. Please keep in mind that a review of the materials could result in a higher, lower, or unchanged grade.
## Tentative Semester Schedule

Readings from the text are indicated as TD (Trochim & Donnelly) or CR (*The Craft of Research*). Items with an asterisk (*) are required and are available in CTools under Resources>Readings.

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1  | 1/14 | Introduction to Scientific Inquiry in Social Work; Discuss course requirements | *Rubin & Babbie: Ch. 1, 2  
*Rosen et al. (1999) | Please bring slides and syllabus to class                               |
| 2  | 1/21 | Foundations of Research                                              | CR: Part 2-3 (pp. 29-102-170)  
*Weiner (2008): Ch1 |                                                       |
| 3  | 1/28 | Sampling                                                              | TD: Ch. 1-2  
*McDonald (thru pg. 149) | Paper 1 Due  
(Research Question / Hypothesis) |
| 4  | 2/4  | Measurement Theory                                                   | TD: Ch. 3  
CR: pp.171-202  
*Ryan (through pg 207) | Quiz 1                                                             |
| 5  | 2/11 | Survey Research - Constructing a Survey, Interviews, Surveys Scales and Indexes | TD: Ch. 4-5  
CR: pp. 203-248 |                                                       |
| 6  | 2/18 | Survey Research, cont.                                               | *Zavella: Ch. 3  
TD: Ch. 6 |                                                       |
| 7  | 2/25 | Designs: Qualitative, Unobtrusive Measures Qualitative / Mixed Method | TD: Ch. 7, 8  
*Steckler et al. (1992)  
*McDonald (150-151 “procedure”) | Paper 2 Due  
(Sampling & Measures) |
| 8  | 3/4  | WINTER BREAK – No Class                                              |                                                          |                                                       |
| 9  | 3/11 | Designs, cont.                                                       | TD: Ch. 9, 10, 11  
CR: pp. 249-269 | Quiz 2                                                              |
| 10 | 3/18 | Advanced Topics Revisited                                            | TD: Ch. 12-13  
*McDonald (2007, cont.) | Paper 3 Due  
(Design & Analysis) |
| 11 | 3/25 |                                                                 | TD: Ch. 14  
*Ryan et al. (2002, cont.) |                                                       |
| 12 | 4/1  | Statistics Lab                                                       |                                                          |                                                       |
| 13 | 4/8  | Culturally Competent Research and Ethics                             | CR: pp. 270-282  
*Two Feathers (2007) | Quiz 3                                                              |
| 15 | 4/22 | Wrap up                                                              |                                                          | Peer Feedback Form  
Final Paper Due  
Reflection Due |
**A Note about Readings:**

Additional readings are provided for additional clarification or explanation. These are located according to topical areas of interest (“Help”) sections, including qualitative and mixed method strategies, statistics resources, and writing resources. You will not be tested on optional readings, but might find it useful for your project or for additional clarification of the assigned material.

**11. Instructions for Assignments:**

**Cumulative Paper Assignments**

There will be four written assignments required in the course. They are designed to be cumulative in the sense that each builds on the previous one, and all of them will be components of your final paper/proposal. In each written assignment, standard margins and font size (1” margins, double-spaced, APA style, Times New Roman 12 point font) is required. The assignments are due (submitted on CTools under “Assignments”) by 6:00pm at the beginning of class on the week indicated in the schedule; however, please note that a draft is due to your peer by 2:00pm the Friday before each deadline.

Please note that with the exception of the Assignment 2, you do not need to receive the prior assignment to begin working on the subsequent assignment. In fact, you might find yourself working primarily on one assignment while also making progress on another.

Assignment #1 – Describe a social problem that interests you. Identify a research question relevant to that problem. State a hypothesis that can represent your best guess for the likely answer to this question (3 pages maximum) – 5 points

Assignment #2 – Propose a sampling strategy for your study, discuss data sources and formulate a set of measures for assessing the key variables and controls (5 pages maximum) – 10 points

Assignment #3 – Propose a research design for your study including a discussion of potential threats to internal validity and how your design will deal with these. A statistical/methodological strategy (with a brief explanation for that choice) should be included (5 pages maximum) – 10 points

**Final Paper** (Due last day of class) – This paper will represent the cumulative efforts and synthesis of the first four assignments plus additional components, including analysis strategy and limitations. It should take the form of a research proposal and include the following elements: problem statement, research question(s), abbreviated literature review, hypotheses, research design, measurement and a discussion of methodological limitations. A concluding statement should address implications on practice, research, or policy, incorporating PODS. This paper should draw extensively on the assignments during the course, as modified by the critiques from your classmates and your evaluation of the research of others. This research proposal is not to exceed 20 pages. The term paper will be due the last day of class in hard copy (early papers gladly accepted). – 25 points
Research Methods Assignment

Option 1 – 4 PEERRS Certification Modules (hand in printed copies of certification of both). (5 Points)

Option 2 – 2 PEERRS Models and Statistics Assignment (Individual or with a partner). You are welcome to use the dataset provided (GSS) or to use your own dataset. In order to get extra credit, you must complete the assignment as well as go beyond, discussing and linking to course and social work concepts. (up to 10 points)

Option 3 – 2 PEERRS Certification Modules +1 Library Workshop of your choice. (5 Points)

Option 1: PEERRS (4 required)

Complete the 4 PEERRS modules listed below, available at http://my.research.umich.edu/peerrs/

If you have already completed one or more PEERRS modules and the certification is valid through the end of the semester, this counts toward your fulfillment of the assignment. Please hand in all 4 certificates of completion (hard copy, stapled) from the PEERRS website.

The following modules are required:

1) Human Subjects - Social & Behavioral Sciences
2) Authorship, Publication and Peer Review
3) Foundations of Good Research Practice
4) Research Administration

Option 2: PEERRS Modules and Statistics Assignment

This option provides an incentive for students to gain hands-on experience in data management, descriptive analyses, and graphical display. You are welcome to work alone or with another student to complete an assignment that demonstrates technical and conceptual understanding of the quantitative analysis portion of the course. You will be provided with a data set for this assignment, but you are welcome to use any data that interest you. If you use other data, you must provide a description of the source of data source and sampling strategy (a link to the study is not sufficient).

As this Assignment is more rigorous than the other options, there is an option for up to 5 extra credit points on this assignment. The project is worth 5 points, but through exemplary discussion and connections to social work practice and/or policy, up to 5 extra credit points could be offered.

Instructions for Option 2:
- Complete Two (2) of the PEERRS Certification modules listed above.
- Using the expanded versions of the GSS dataset (and accompanying Codebook) that were used for the statistics lab, select two related dependent variables of interest. One should be based on a Likert scale and one should be a dichotomous variable.
- Select at least 2 explanatory variables of interest (one should be continuous). Select at least one control variable.
- Briefly describe why you have chosen these variables and what your hypotheses are about the relationships between these variables.
- Conduct any form of recoding necessary to check for problems with the data
- Report the frequency and percentage distributions of each variable.
- Transform one variable (could be a dependent or an independent variable) into a different number of categories for the purpose of your analysis.
- Conduct a series of T-tests (or other statistical comparisons) to examine differences in your dependent variables by differences in your independent variables. This should result in at least 2 T-Tests. Briefly comment on the results for each.
- Conduct a correlation analysis on your control variable with each independent and dependent variable. Comment on the results and what that might mean for your results.
- Create at least one graph/chart that shows the relationship between an independent and dependent variable. Discuss.
- Discuss some limitations of this analysis and what other information would be helpful to be able to increase your ability to make causal inferences.

Please print out your comments/discussion/results as well as your work (the output). Please do not print out any output that is not relevant or where mistakes were made.

**Option 3: 2 PEERRS Modules and Library Workshop**

In addition to completing (2) of the PEERRS Modules listed above, attend a Library session that would be useful to your professional development. Please look into these options early, as the workshops are only offered on specific dates and can fill up quickly. A signed attendance form (available on CTools) from the instructor is required.

Registration, times and descriptions are available at: [http://ttc.iss.lsa.umich.edu/ttp/sessions/upcoming/](http://ttc.iss.lsa.umich.edu/ttp/sessions/upcoming/)

Eligible workshops include:

1. Creating Professional Conference Posters (1/22 and 2/7 from 10am-12pm; 2/19, 6-8 pm)
2. A different Library Workshop that would advance your professional goals (please check first with instructor)
3. A CSCAR Workshop ([http://cscar.research.umich.edu/workshops/](http://cscar.research.umich.edu/workshops/)) – Please note that most have costs associated with them.
Grading Rubric for Final Paper (100 Points)

<table>
<thead>
<tr>
<th>Items to Evaluate</th>
<th>Value</th>
<th>Earned</th>
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</thead>
<tbody>
<tr>
<td><strong>I. Writing (20 Points)</strong></td>
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<tr>
<td>a. Discussion of material follows organizational format of the course;</td>
<td>5</td>
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</tr>
<tr>
<td>Follows headings (assignment titles) / subheadings when appropriate</td>
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<tr>
<td>b. Writing style is clear, concise, easy to understand</td>
<td>5</td>
<td></td>
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<tr>
<td>c. Spelling, grammar, punctuation</td>
<td>5</td>
<td></td>
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<tr>
<td>d. Follows APA format (in-text and reference list)</td>
<td>5</td>
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<tr>
<td><strong>II. Content (80 Points)</strong></td>
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<tr>
<td>a. Introduction and Problem Statement – The issue/problem is clearly and concisely described and linked to social justice issue</td>
<td>5</td>
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</tr>
<tr>
<td>b. Research Question – The research question is presented in a clear and answerable format</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>c. Brief Literature Review – The body of relevant literature is discussed that leads up to the current research question. The proposal is situated in the context of what literature has contributed and where there are gaps in the literature</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>d. Hypothesis - One or more alternative hypotheses must be articulated that are testable, concisely stated, and specifically describe the relationship between 2 variables. (NOTE: if you are writing paper with qualitative methods, then discussion of the process explored should be further discussed in the Research Question section)</td>
<td>5</td>
<td></td>
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<td>e. Research Design and Analytic Strategy –</td>
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<td>- The design of the study should be clearly presented, including safeguards to prevent threats to internal validity. If an intervention is included, this should be described. Sampling strategy should be discussed clearly and concisely.</td>
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<td>- The strategy through which you will test your hypothesis/es should be clearly presented. This strategy could include, for example, appropriate statistical tests or analysis of qualitative data. The tests should be appropriate for the kinds of data you are analyzing.</td>
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<td>f. Sampling and Measurement</td>
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<td>- Data sources/sampling strategies should be clearly identified</td>
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<td>- Sources of data should be identified. Methods of measurement should be clearly and specifically defined for independent, dependent, and control variables; the measures used should be presented. If a different scale is used or adapted, the original purpose of that scale should be cited and discussed. Attachments of scales and measures are fine, but key variables should also be described in the text of the paper. The forms of measurement should link to body of current literature. (NOTE: if you are writing a paper based on qualitative methods, the codes/themes should be clearly identified and discussed).</td>
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<td>g. Limitations – The limitations to internal validity, external validity, and other threats/biases are clearly identified.</td>
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<td>h. Conclusions – Concluding paragraphs should tie together what potential findings could mean for (a) the research area and (b) for social work practice or policy.</td>
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