**Appendix**

Thank you for your interest in our article “Doing Social Justice Turning Talk into Action in a Mathematics Service Learning Course.” This Appendix includes:

Appendix A Partial Syllabus describing Objectives and Grading Structure

Appendix B Service Learning Project Semester Timeline

Appendix C Journal Prompt for Student Reflection on Service Learning Project

If you are interested in full activity/assignment details such as the “What is Service?” activity or the full Project Proposal description, please email the authors at:

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**Appendix A**

Partial Syllabus

**Service Learning for Mathematics Consultants - Syllabus**

**Course Description**

Service learning placements in local non-profit organizations, school districts and community organizations help student students deepen their understanding of mathematical principles, techniques, and methodologies for effective consulting. Students will also study how the need for mathematical and statistical analysis can influence issues of social justice and equity within the local and global community.

**Course Prerequisites:** Lower-Division Service Learning

 Introductory Statistics (concurrent or previously)

**Course Materials**

Required Text: O-Neil, Cathy (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* Crown ISBN 13: 978-0553418811

**Major Learning Outcome 2: Service to the Community**

Students demonstrate the ability to combine disciplinary knowledge and community experiences to share the relevance and importance of mathematics with culturally, linguistically, technologically and economically diverse populations in the context of issues of social responsibility, justice, diversity and compassion.

**Equity and Justice Questions**

The questions of equity and justice that we will be investigating together in this course focus both on the local non-profits and service organizations with whom we will be working and also on international organizations and the “third-world”, using information we collect from a variety of sources.

1. What is the “data divide” and what evidence might indicate that such a divide exists?
2. What kind of mathematics is used in policy development and decision making by community organization, local and international non-profits and governments in poor and developing nations?
3. What needs exist for mathematical and statistical analysis in local organizations, social services, and poor and developing nations?
4. Are there connections between access to mathematical/ statistical analysis and economic well-being, success, and policy decisions for local/international service organizations?
5. What does the future hold for service organizations and developing countries who fail to develop access to mathematical and statistical analysis? What hidden economic and equity-related costs are societies incurring when they fail to gain access to data analysis?

**Assessment of Outcomes**

|  |  |  |
| --- | --- | --- |
| **Assessment** | **Description** | **Grade** |
| Student Reflection | Consultant/Time Log(Provided) | Log of hours worked each weekLog of discussions with partners on projectLog of discussions with professor or advisors on projectLog of work/analysis on project and current results | 5% |
| Weekly Reflection | Journal entry on weekly readings and reflections on experiences so far | 15% |
| Partner Evaluation | Mid-term Evaluation | Evaluation completed by partner organization of the students cooperation, work ethic and progress | 2.5% |
| Final Evaluation | Evaluation completed by partner organization of the students cooperation, work ethic and final report | 2.5% |
| Consulting Project | 1. Project Proposal/Presentation (15%): A proposal for the service project defined by the partner. A rough draft will be required prior to submission for peer review. A class presentation will also occur.
2. Final Report and Presentation (15%): A complete report of all findings as they relate to the project provided by the partner and in consultation with the partner. A class presentation will be included as a part of the final report. Format based on the partner’s requirements. A rough draft will be required prior to submission for peer review.
3. Partner/Course Defined Product Portfolio (5%): All products required as defined by the partner and made accessible/delivered to the partner.
 | 35% |
| Classroom Participation | Regular classroom attendance and participation in classroom discussions and activitiesEvidence of preparation for discussions through ability to discuss assigned readingsAgreement to participate in Civil Discourse | 10% |
| TEDx Presentation | Gather and analyze data on some aspect of social justice and present a TEDx talk of your findings. Lead a classroom discussion on your topic chosen for the TEDx Talk | 20% |
| Final Reflection and Synthesis | A reflection essay on the course content, consulting project and the student’s personal synthesis of the service learning experience and their future personal and career goals | 10% |
| **Total** |  | **100%** |

**Grading scale:**

|  |  |  |  |
| --- | --- | --- | --- |
| 98-100% | A+ | 92‐97.9% | A |
| 90‐91.9% | A- | 88‐89.9% | B+ |
| 82‐87.9% | B | 80‐81.9% | B- |
| 78-79.9% | C+ | 70‐77.9% | C |
| 60‐69.9% | D | 0-59.9% | F |

**Student and Classroom Expectations**

You are expected to arrive prepared and on time to class. You should be ready to actively engage in the classroom material. Participation should include consideration and respectful communication for others and the course. **You are also expected to turn off or silence your cell phone and other communication devices during class time—this includes access to text messaging.** Use of electronic communication during class for non-class related purposes is not only disruptive to teaching and learning, but is discourteous to your peers and our learning community. ***You will be asked to leave for the day if you cannot refrain from engaging in any such activity.*** In addition, headphones should be removed during class time.

1. **Service to Community Partners** Participants will spend 30-40 hours, 2.5-5 hours weekly, consulting with local non-profits and service organizations in our county. Submission of a partner evaluation and time-log are required. *Service should continue all semester, even if hours have been completed early.* Part of the time will be spent working directly with the community partners and part of the time will be spent working on the consulting project for the community partner. **Failure to complete the service learning portion of the class will result in a failure of the course.**  Please remember you are a representative of the university community, the Mathematics and Statistics Department, and the professor and therefore **if some issue does arise with the service placement please contact your professor immediately!**
2. **Classroom Discussions** Classroom discussion should be civilized and respectful to everyone and relevant to the topic we are discussing. Agreement to participate in Civil Discourse is required to receive classroom participation credit (see agreement). Classroom discussion is meant to allow us to hear a variety of viewpoints. This can only happen if we respect each other and our differences. Correction must be through evidence to the contrary and presented in a respectful manor. **You will be asked to leave for the day if you repeatedly ignore the rules of Civil Discourse.**

**Appendix B**

Service Learning Project Semester Timeline

|  |  |
| --- | --- |
| **Time** | **Project Milestones** |
| 1-2 Months Before Semester | Recruit Community Partners; Determine Project Descriptions |
| Week 1 | LARA Method; What is Service? |
| Week 2 | Community Partners Visit Class |
| Week 3 | Projects Assigned; Project Proposals are started |
| Week 4 | Meet with Community Partners and Develop Project Proposals |
| Week 5 | Peer Review of Project Proposals |
| Week 6 | Project Proposals Due |
| Week 7 | Formal Presentation of Project Proposal to Class |
| Week 10 | Community Partner Midterm Evaluations Due |
| Week 11 | Formal Project Update in Class\* |
| Week 13 | Final Assignments Given (synthesis paper, final report, time log, etc) |
| Week 15 | Peer Review of Final Reports |
| Week 16 | Project Presentations; All Final Assignments Due |
| \*Informal updates are given every week |
| WMD book chapters are assigned weekly and discussed at length in class. |
| TED topics are chosen in week 7 and presentations occur during weeks 10-15 |

**Appendix C**

Weekly Journals – Journal Prompt

Students have at least one journal assignment a week, sometimes more; personal reflections on the project are required every other week. Journal assignments based on class readings are typically given weekly. Below is the journal prompt for reflections on the service learning project. More specific prompts are given for each reading assignment.

**Personal Reflections**on your placement and your responsibility to be of service to others, as a mathematically empowered individual.  Here are a few reflections to consider, but keep in mind these are guidelines, not rules.

1. Reflect on your experiences in your placement and how they relate to the discussions in our classroom (readings, presentations, etc.)
2. Reflect on how you have grown as a mathematician/statistician in your placement and your hope for future development.
3. Reflect on how you might serve your community in your future field/career.

The Personal Reflection is meant to be a way to express your feelings and thoughts.  I cannot and will not grade your feelings and thoughts as those are your own.  Assessment of the Personal Reflection will be based on clear communication of ideas and thoughts. There is a 400 word minimum.

*3pts:*Evidence of thoughtful reflection in addition to thorough and clear communication

*2 pts:*Thorough and clear communication of ideas.

*1pt:*Incomplete, shallow, or not communicated clearly.

*0 pts:*No work submitted.