SPEA V600/E517 – Spring 2020

MW, 2:30-3:45, SPEA ____

Class Number:

Office Hrs: T, 1:00-3:00pm

or by appointment

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Capstone in Public and Environmental Affairs

Partnering with the Friends of Lake Monroe (FLM)

Course Description and Objectives

Nestled in the hills of south-central Indiana, one finds Indiana's largest (artificial) lake: Lake Monroe. Originally built as a flood control reservoir, it now serves surrounding communities with drinking water, offers endless recreational opportunities and countless revenue generating activities, and community resiliency with stored water. The ecosystem management of this very large watershed includes five county jurisdictions. This capstone will continue to work with the Friends of Lake Monroe (FLM), a local incorporated 501(c)3 nonprofit organization whose mission is "to protect and enhance Lake Monroe and its watershed through science, advocacy, and public involvement: working collaboratively with citizens, government, and business to improve and support lake water quality."

In 2018, students conducted a sediment budget study, uncovering that a substantial amount of sediment delivery resulted from shoreline and streambank erosion. In 2019, students designed a valuation study of Lake Monroe and its watershed in an attempt to elicit people's valuation of reducing sediment inputs, nutrient inputs, land use changes, corrective and preventative installations, etc. Students conducted an economic evaluation/BCA of Lake Monroe anits watershed. As a result of the 2018 sediment study, this capstone will try to quantify shoreline and streambank erosion and the phosphorus load associated. They could revisit the 1997 shoreline transects, the original watershed and lake assessment, consider a subset of the previous parameters. Based on the assessment, mitigation measures, associated costs, and a management plan is requested. The class will also participate with the awarded 319 Watershed Management Plan Spring Sampling Blitz, which is set up to characterize the tributaries of this large 5-county watershed.

This capstone offers a unique opportunity for SPEA students to work with city government and various departments within. It will enable students to view current public policy, the dynamics of intradepartmental coordination and collaboration, and challenges. The client for this project is FLM with the primary client representative for the project is Sherry Mitchell-Bruker, founder. Sherry's email is: friendsoflakemonroe@gmail.com.

The V600 Capstone courses are intended to address topics that integrate public policy, management, and science/technology in an interdisciplinary framework. The expectation is that the class will involve a group project that requires students with very different backgrounds and skills to work together in a collaborative learning format. The course is a capstone for the core curriculum rather than a concentration element and deals with interdisciplinary, interrelated issues that generally arise in the professional positions students are expected to obtain. In keeping with these objectives, this section of V600 is intended to draw upon a wide variety of previous coursework, including both the core curriculum of the MSES/MPA and each student's individual concentration areas.

Those jurisdictional entities within the Lake Monroe watershed a few provisions to address stormwater and encourages green infrastructure but lacks any requirements or regulations with substance beyond voluntary encouragement, which is rarely considered. What is feasible for the community residing in the watershed and utilizing these water resources? Can we recommend a sustainable source water protection plan with

attainable goals and action items? Students will acquire the skillset to implement Best Management Practices (BMP) within urban and rural watersheds. Students will explore the various innovative BMPs and green infrastructure and the respective ecological analysis and impacts. Not only do BMPs improve challenges of water quality and quantity, they also improve municipality resilience for sustainability and future development.

The course will have a workshop format. Thus, class members will divide into groups to address the various aspects of the project. Each group should focus on a specific topic or major element of the project. Students will also need to establish an organizational structure to coordinate both within and across groups, to generate the final recommendations and summary analysis, and to work with the client organization. The precise organizational structure will be established by class members with input from the instructor.

Most of the group work will take place outside of regular class sessions. Thus, the full class will not meet at every session. Class sessions for which a full class meeting is not required are identified as "Group Meetings" in the syllabus. These class sessions provide a time and location at which all group members should be available for group meetings. Groups may choose to use these sessions for this purpose, or may meet outside of these class sessions. For these classes, the instructor will generally be available at 2:30pm in the classroom to meet with any groups or individual students who wish to consult. For those class sessions identified as "Instructor Meetings," each group (with all group members present) will be expected to meet with the instructor in the classroom for ten minutes to discuss group progress, issues, and general questions. A schedule with each group's meeting time will be distributed for these sessions after the group structure has been established.

E517/V600 LEARNING OUTCOMES

- 1. Construct a team based on team member skill sets that optimizes the potential to produce very high quality project work. Establish, implement, and modify as needed effective means for managing the team's work, communicating with and among team members, and resolving disputes involving team members.
- 2. Inspire leadership skills within and across project teams to inspire and coordinate the work of classmates in order to complete project work in a timely way and to maximize its quality. Evaluate whether and how to supply input to leaders on a given issue, and perform work according to instruction and direction from leaders.
- 3. Establish realistic schedules for completion of project tasks, track progress efficiently and accurately, and adjust schedules appropriately to account for changes in scope and other circumstances that modify the project direction or deliverables.
- 4. Identify, assess, and incorporate into the project schedule and work a variety of time and resource constraints, and develop methods to maximize the time and resources available. Plan individual and team work to minimize the risk of delaying other parts of the project.
- 5. Integrate, as individuals performing work within a team, skills and knowledge acquired throughout the masters curriculum; integrate the work of team members contributing different skill sets and expertise, into a well-organized, holistic final product.
- 6. Enhance listening skills; design and deliver effective, audience appropriate communications that are responsive and professional in style, format, and tone.
- 7. Establish clear expectations with client on the project scope and planned deliverables; deliver swift, responsive, and professional replies to client inquiries; coordinate client communications to maximize their

value for the project and avoid inappropriate demands on client time and resources.

- 8. Plan and conduct research and analysis, and develop recommendations that expressly reflect and appropriately integrate any conditions of uncertainty.
- 9. Organize, write, and present a professional quality report, poster, and PowerPoint presentation for (and to) the client and the SPEA community both summarizing and detailing the project research, analysis, conclusions and recommendations.

Course Requirements and Grading Criteria

An oral and written work plan, two oral and written progress reports, a draft of the final report and recommendations, a preliminary presentation of the final report and recommendations, a final written report and presentation to the client, a poster presentation of the project and results, and a website (if requested to be added to the FLM website) describing the project and results will be part of the requirements. The work plan is a critical element of the course. It should be designed by all class members to address each group's anticipated major tasks, the timeline for these tasks, and the overall method and timeline for integrating group contributions into a comprehensive final report, presentation, and other deliverables. The work plan should include an organizational strategy for ensuring cooperation and coordination across groups during the semester, particularly since the project's components are interdependent and can only be adequately addressed through a coordinated strategy. Formal presentation of the work plan and discussion with the instructor and client representatives should result in a revised document. This revised work plan will guide each group and the class throughout the remainder of the semester.

Each of the progress reports should discuss work accomplished to date, upcoming challenges and anticipated problems, anticipated changes to the work plan, etc. These progress reports should be done from both a group and class perspective.

The preliminary project presentation is a dress rehearsal for the final presentation to the client representatives and other stakeholders, and includes presentation of the draft poster. It should be treated as though the class was making the final presentation to the clients, although students will not need to dress up. Its purpose is to allow for feedback from the instructors, client representatives, and class members, and to ensure that the final presentation will be of the highest quality. Appropriate dress is required for the final presentation.

Grading will be a combination of class, group, and individual evaluations. The following grading criteria will be used:

Preliminary Project Presentation and Draft Report	5%
Final Project Presentation	15%
Final Written Report	15%
Group/Class Work Plan	10%
Group/Class Progress Report I	5%
Group/Class Progress Report II	5%
Wider World Presentation	10%
Group Assessment	10%
Midterm and Final Peer/Self-Evaluations	15%
Class Participation	5%

Everyone in the class will receive the same grade for the preliminary project presentation, the final project presentation, the draft and final written reports provided to the client representatives. Group grades will be given for the work plan, progress reports, and the group assessment (this is the instructors' overall assessment

of each group's effort). The peer/self-evaluations will be done at the middle and end of the semester, and will provide an opportunity for each student to assess the contributions of themselves, other group members, and other class members. The class participation grade is an assessment of individual contributions to the class from the instructors' perspective. There is also a required self-reflection assignment concerning learning outcomes at the end of the semester.

The V600 Canvas site, IU Box, or another class determined (generically referenced as 'Canvas') repository will be used as the primary site for documentation, resources, relevant readings, and data sets. Thus, all major documents must be uploaded to the selected site in addition to being submitted to the relevant parties. These include the work plan, progress reports, the final report and presentation, a link to the Web site, and a pdf of the poster. Required readings may be added to the syllabus and the Canvas site as the semester progresses, some of which may be required for the entire class and others for specific groups.

Tentative TOPICS AND ASSIGNMENTS – SPRING 2020

Date	Topic/Activity
1/7	Introduction
1/9	Background & Discussion with Sherry Mitchell-Bruker, Friends of Lake Monroe founder
1/14	MLK Day – no class
1/16	Group Structure, Membership, and Coordination Discussion
1/21	Group Meeting
1/23	Instructor Meeting
1/28	Work Plan Practice Presentation
	Work Plan Draft due in Canvas by midnight
1/30	Work Plan Presentation
2/4	Group Meetings
2/6	Guest: MS4 Coordinators
2/11	Instructor Meeting
2/13	BMP tour
2/18	Group Meetings
2/20	Instructor Meetings
2/25	Progress Report #1 Presentation
2/27	Group Meetings
3/4	Midterm Peer/Self Evaluations
	Instructor Meeting
3/6	Group Meetings
3/11	Spring Break
3/13	Spring Break
3/18	Group Meetings
3/20	Instructor Meeting
3/25	Group Meetings (Melissa gone to NWQMC)
3/27	Group Meetings (Melissa gone to NWQMC)
3/29	Draft Deliverable(s) Due to Client – unless requested otherwise
4/1	Group Meeting (Melissa gone to CWP??)
4/3	Progress Report #2 Presentation
4/8	TBA
4/10	Class Discussion of Presentation, Final Report Planning
4/15	TBA
4/17	Teaching evaluations

	Peer/self-evaluations
	Group Meetings
4/19	By midnight: Draft of Final Report to Canvas
4/22	Preliminary (Practice) Project Presentation
	Draft of Web Site Presented to Class
	Final Peer/self-evaluations due
4/24	Final Presentation to Client Representatives and Other Stakeholders
5/1	Final Report Due by Midnight
	Other deliverables finalized by Midnight???
	Reflection Assignment Due by Midnight