INTRODUCTION

SYS 590 Service Learning and Systems Thinking is a 1-credit team-based independent study course that has a limited enrollment of 6 students who are also enrolled in SYS 530 Practical Systems Thinking as a corequisite.

The community partner for the student team enrolled in SYS 590 is HomesteadCS, a non-profit HUD-certified Housing Counseling Agency in Lafayette, Indiana, offering Education and Consulting Assistance to all homeowners and potential homeowners regardless of income. It is a 501(c)(3) non-profit organization governed by a volunteer Board of Directors.

The HomesteadCS organizational goal is to keep people in their homes, and one of the tools they use is financial education. Many students are coming out of college with large debt, mostly student loans and little idea how to manage their finances. HomesteadCS aspires to have well-organized education classes for Purdue students, have enough instructors to teach the classes, and have measurable outcomes.

Students enrolled in SYS 590 will gain experience in applying systems methods to understand how a small non-profit community-service organization and a large non-profit university can join forces to provide a valuable educational service to the university’s students. They will be able to use their expertise to make a community difference, enhance their communication skills, gain an understanding of adult education, and gain an understanding of the student population at Purdue.

In parallel with SYS 590 activities, the student team will execute two back-to-back projects in SYS 530 during last two-thirds of the semester working with the community partners. The two SYS 530 projects are (1) an interpretive system project that applies of the Viable System Model to enable the course students and community partner to work together to establish the organizational context for the problematic situation that the community partner and the university are facing and (2) a soft systems project that applies a combination of Soft Systems Methodology and Critical Systems Heuristic working with the community partner to address the problematic situation that is embedded in the organizational context that was previously established using the Viable System Model. In essence, the projects are a strategic planning activity to help community partner sort out their situation and come up with a plan that the community partner and the university will then execute.

This document contains basic information about the SYS 590 class, including contact information for the instructor. The distribution of reading material, project assignments, etc. uses Purdue's Blackboard site. Students must register for SYS 590 to access the class page on Blackboard.

All material needed for class should be available; if you find this is not the case, please e-mail the instructor.

Meeting Times and Location

Additional meetings for the SYS 590 students beyond the meeting for SYS 530 are to be scheduled as needed.
Instructor

Dr. C. Robert Kenley
Associate Professor of Engineering Practice, School of Industrial Engineering
Office: GRIS 370  Phone: +1 765 494 5160  E-mail: kenley@purdue.edu
Web: http://web.ics.purdue.edu/~ckenley/
Webex Conferencing: https://purdue.webex.com/meet/ckenley
Office Hours: You have two options to request a meeting with Professor Kenley.
1. For a more seamless meeting request interaction, create an Exchange meeting request by accessing your purdue.edu account via a browser at https://outlook.office365.com or via the Outlook desktop application, which has Meeting Planning and Scheduling Assistant capabilities
2. Check the calendar link at Professor Kenley’s web site, type up and send an e-mail that suggests a couple of times to meet, and wait for an e-mail response from Professor Kenley

SYLLABUS

Course Outcomes

There are four key learning outcomes for this course:
1. The ability to explain and demonstrate how systems approaches can be used as tools for affecting social change
2. The ability of each student to describe how their own systems skillset can be a means for future civic engagement
3. An increased sense of efficacy when it comes to matters of civic engagement
4. Gaining a broader view of how systems approaches can be applied within a community

Prerequisites and Corequisites

Graduate students and undergraduate students with Upper Division standing from all majors are welcome. Students must also be registered in SYS 530 Practical Systems Thinking as a corequisite.

Academic Integrity

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.

Purdue’s Honor Pledge was developed by students to advance a supportive environment that promotes academic integrity and excellence. It is intended that this pledge inspires Boilermakers of all generations to stay “on track” to themselves and their University.

As a Boilermaker pursuing academic excellence,
I pledge to be honest and true in all that I do.
Accountable together – We are Purdue.
Attendance
The University Regulations Handbook reads: "Students are expected to be present for every meeting of the classes in which they are enrolled." If you must miss a meeting, you are responsible for following up with team members and the instructor to ensure that you are meeting your obligations.

Campus Emergencies
In the event of a major campus emergency, course requirements, deadlines, and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Information about these changes will be available from the public website for this course, Blackboard, or via e-mail.

Assignments
An Excel file that shows the assignments is posted to Blackboard. Check Blackboard often, as the schedule and assignments may change as the semester progresses. Access to Blackboard is restricted to students currently enrolled in the course. In addition to instructions, each assignment has a rubric associated with it that you should review when preparing your assignments for submission.

Civic-Minded Graduate Scale
This inventory is designed to help assess your views and attitudes at the beginning of the semester. You are not graded on your responses, simply on your on-time submission.

Reading and Reflection Assignments
You will be presented with three different sets of reflective writing prompts to help you critically consume the course readings. Table 1 shows the course topics for which you will have assigned readings that cover service-learning concepts.

Table 1. Course Reading Topics

<table>
<thead>
<tr>
<th>Topics</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Service Learning</td>
<td>1</td>
</tr>
<tr>
<td>Civic Engagement in Higher Education</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Praxis</td>
<td>3</td>
</tr>
</tbody>
</table>

Team Charter Addendum
An addendum to your SYS 530 team charter will be required to address unique aspects of the service-learning activities required by SYS 590.

Campus Compact Summit Field Trip Reflection
You will be asked to take a trip to attend the Campus Compact Summit Field Trip, which is all day on February 24 at the Ivy Tech Conference Center in Indianapolis. Your registration fees for this event will be paid for by Purdue, and a Purdue van will be reserved for travelling to and from Indianapolis. After your field trip, you will be asked to write a reflection on your trip that addresses these questions: “What? So What? Now What?”
**Homestead CS Training Events Reflection**

You will be asked to participate training offered by HomesteadCS to their current target population. The in-person training is in Lafayette, and as of the writing of this syllabus, there are two different free in-person training events that you will be asked to participate in. You will also be asked to take an online training offered by a HomesteadCS training partner. The online training has fees associated with it that will be paid by Purdue. The principal purpose of participating in the training is to understand the community served and the venues where HomesteadCS currently is connecting to people rather than the training content (although the content will be useful to you). After your each of your training events, you will be asked to write a personal reflection on each training experience that addresses these questions: “What? So What? Now What?” A due date for submitting these reflections is in March to give you flexibility; however, *it is highly recommended that you participate in the training and submit your reflections as early as possible in the semester when you do not have other work that is due* rather than waiting to complete theses assignments close to the deadline when you will have many other assignments and exams that you will have to manage.

**Presentations to HomesteadCS Board**

Your team will be asked to attend the HomesteadCS board meeting on Tuesday March 12 and April 9 and to make a short presentation to the board. They meet from 12:00 to 1:30 on these days. It will not necessary for your entire team to attend the meeting.

**Interpretive Systems Project Team Report Addendum**

The SYS 530 project application of the Viable System Model enables the course students and community partner to work together to establish the organizational context of HomesteadCS for the problematic situation that the community partner and the university are facing. A significant amount of effort for SYS 590 will be required to apply the Viable System Model to establish the organizational context of Purdue that HomesteadCS will have to interact with to deploy their proposed financial education services into the Purdue ecosystem. For those who have studied systems of systems, HomesteadCS and Purdue can be viewed as two managerially and operationally independent systems that will have to interact to achieve the objective of providing a valuable educational service to the university’s students.

**Qualtrics Survey**

This survey is administered by the Purdue Service-Learning Office in the Office of Engagement that reports directly to the Provost. You are not graded on your responses, simply on your on-time submission.

**Course Materials**

There is no required book for this course. There will be readings from journal articles, online texts, and other sources. These readings can be accessed either as files posted on the Blackboard site or via the links provided. Many of the links use the Purdue library proxy server and require two-factor authentication using BoilerKey.

**Missed or Late Work**

The instructor will not accept late work.
In extreme circumstances, the instructor might accept late work with an appropriate penalty to the score. These circumstances most likely would be those that lead to a student filing to receive a grade of Incomplete in the class. For late homework to be considered for grading, the student must provide the instructor a written request with justification as to why the circumstance is extreme.

**Course Grades**

This course will be based on your ability to critically read and understand the readings, to write reflections on the readings and on the other activities, and to complete projects during the semester that make use of the topics and methods presented in the course.

There will be a numerical score for each assignment. The exercises and projects involve groups using the concepts and methods with no single correct answer, so the grading of the course will account for this. If students have a concern about a grade on their work, they should first bring it to the attention of the person who graded the work. Requests for reconsideration / regrading must be made within one week of when the work is returned to students.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Weight</th>
<th>Team or Individual Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic-Minded Graduate Scale</td>
<td>23-Jan</td>
<td>6%</td>
<td>Individual</td>
</tr>
<tr>
<td>Reflection on Module 1</td>
<td>23-Jan</td>
<td>5%</td>
<td>Individual</td>
</tr>
<tr>
<td>Team Charter Addendum</td>
<td>30-Jan</td>
<td>10%</td>
<td>Team</td>
</tr>
<tr>
<td>Reflection on Module 2</td>
<td>6-Feb</td>
<td>5%</td>
<td>Individual</td>
</tr>
<tr>
<td>Reflection on Module 3</td>
<td>13-Feb</td>
<td>5%</td>
<td>Individual</td>
</tr>
<tr>
<td>Reflection on Campus Compact Summit</td>
<td>3-Mar</td>
<td>10%</td>
<td>Individual</td>
</tr>
<tr>
<td>Presentation to HomesteadCS Board</td>
<td>12-Mar</td>
<td>10%</td>
<td>Team</td>
</tr>
<tr>
<td>Interpretive Systems Team Report Addendum</td>
<td>26-Mar</td>
<td>25%</td>
<td>Team</td>
</tr>
<tr>
<td>Reflections on HomesteadCS Training Events</td>
<td>2-Apr</td>
<td>9%</td>
<td>Individual</td>
</tr>
<tr>
<td>Presentation to HomesteadCS Board</td>
<td>9-Apr</td>
<td>10%</td>
<td>Team</td>
</tr>
<tr>
<td>Qualtrics Survey</td>
<td>3-May</td>
<td>5%</td>
<td>Individual</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Course Evaluation</td>
<td>3-May</td>
<td>1%</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Total with Course Eval</strong></td>
<td></td>
<td>101%</td>
<td></td>
</tr>
</tbody>
</table>

Computation of final course grades will use the following distribution of weights:

- 55% of the weighting is allocated to team results.
- 45% of the weighting is allocated to individual results.
Final letter grades for the course will use the table below. The total numerical score will be rounded to the nearest integer percent.

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
<th>Score</th>
<th>Grade</th>
<th>Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>98 to 100%</td>
<td>A+</td>
<td>88 to 89%</td>
<td>B+</td>
<td>78 to 79%</td>
<td>C+</td>
</tr>
<tr>
<td>93 to 97%</td>
<td>A</td>
<td>83 to 87%</td>
<td>B</td>
<td>73 to 77%</td>
<td>C</td>
</tr>
<tr>
<td>90 to 92%</td>
<td>A-</td>
<td>80 to 82%</td>
<td>B-</td>
<td>70 to 72%</td>
<td>C-</td>
</tr>
</tbody>
</table>

A total score of 59% or lower will always fail.