

Valencia Community College
Curriculum Plan – Service Learning Across the Curriculum

Name: David Stendel Discipline: Information Technology

Course Name and Prefix: COP 1000C – Intro to Programming

1. Course Outcome

This is a course outcome from the syllabus or course outline builder that will be met by completing the service learning activity

Each student will solve problems with simple sequence, selection, and repetition statements by using different data type variables, expressions, and flow control.

2. Project Type

Type of Service	<input checked="" type="checkbox"/> Direct Service <input type="checkbox"/> Indirect Service <input type="checkbox"/> Advocacy
Agency Selection	<input checked="" type="checkbox"/> Students will select service agency individually <input type="checkbox"/> Faculty will select a few agencies for students <input type="checkbox"/> Faculty will select one agency for the whole class
Project Options	<input type="checkbox"/> required individually <input checked="" type="checkbox"/> extra credit <input type="checkbox"/> required small group <input checked="" type="checkbox"/> optional project <input type="checkbox"/> required whole class

3. Overview & Purpose of Service Activity

Overview

Students or small groups of students will contact agencies to find out if they have any programming needs. If an agency does have a need for the development of an application to serve the agency or community, the students will interview the various stakeholders, users, etc. to develop a plan, i.e., hierarchy chart, flowchart, Input-Process-Output (IPO) diagram, pseudocode, test cases, etc. The plan will be included with a report, and possibly a presentation, which will include information about their experience, what they learned, how it affected them, etc. If the agency does not have a need, the student(s) will need to find another agency to contact, which has not already been selected by other students.

Purpose

The purpose of this project is to provide the students with a way to connect with the community while learning interviewing and problem-solving skills. In turn, I hope this project will lead to future projects in future courses, where the students will take a plan from this project and use it to develop a useable application.

4. Service Learning Outcomes

Academic

Students will improve their problem solving and coding skills by connecting what they learn in the classroom with what is needed and learned via the service experience.

Civic Engagement

Since the application, on which they would be working, would be based on what the agency deems appropriate to help them help the community or help the community directly, the students will gain an understanding of the community organization and those it serves along with how to communicate with both to gather information to develop an appropriate application.

Preprofessional

I think the team aspect would be important, because programming is often done through collaboration, so it would give the students some experience working with groups, and it would increase their chances of successfully completing a usable application. They will also learn to program by solving a "real world" problem including gathering the information needed to plan and develop the application.

Personal

I think the students would grow in many ways as already mentioned above, but also come to have a better understanding about communities and people, which may be outside their norm, and hopefully, be a better person as a result.

5. Preservice Activity

Activity

Students will participate in a discussion via Blackboard, where they will post what agency they will initially be contacting, and answer questions, for example:

- What does service learning mean to them?
- Why did they select the agency they posted?
- How do they think this relates to Intro to Programming?

They will also have to reply to at least three other original post by their fellow students, e.g., What did they like/dislike concerning what the other students said, and more importantly, why? and what other thoughts/comments would they like to add?

Purpose

The purpose of the assessment is get the students to pick an agency, which they are going to contact to find out if they have any programming needs, and begin thinking about what service learning is and how it relates to them.

Assessment

Blackboard Discussion

6. Reflection Activity

Activity

Students will participate in a discussion via Blackboard, where they will summarize what they have learned and their experience, and answer questions, for example:

- What programming needs did the agency/community have?
- Would this require a new program or updates to an existing system?
- With whom did they communicate to get the information needed to plan and create the program?
- What was that experience like?
- What did you learn about the community? Yourself? Information Gathering?
- Were there any surprises or “ah ha” moments? Please elaborate.

They will also have to reply to at least three other original post by their fellow students, e.g., What did they like/dislike concerning what the other student said, and more importantly, why? How did this relate to their experience?

Purpose

The purpose of the assessment is to have the students reflect on their experience and share what they have learned with the other students, and in turn, reflect and learn from each other.

Assessment

Blackboard Discussion

7. Demonstration Activity

Activity

Students will create a planning report, which will provide the next semester's students with the information they need to write the code and create a functioning program, including hierarchy chart, flowchart, pseudocode, layouts, etc. Additionally, they can also create a presentation/video, which will discuss the agency, their programming need, what the students did, learned, etc.

Purpose

The purpose of the assessment is to provide the needed information to create a program, giving the students experience with organizing their thoughts, and writing technical documents, reports, etc. Also, if they create the presentation/video, it will give them the experience of working with those applications and practicing those related skills.

Assessment

Microsoft Word report, and possibly a presentation/video.

8. Syllabus Component

Explanation

To provide extra credit to improve one's grade or replace a poor grade on one or more assessments, the student or small group of students can complete the Service Learning project, which consists of two discussions and one report, and optionally a presentation/video. Participation in the Service Learning component of this course is optional for all students. This includes the service hours with the agency and any accompanying assignments. Students who fail to complete the Service Learning project will NOT receive points toward their overall **A** assessment points. It is important, students communicate any concerns about fulfilling the Service Learning project requirements with the instructor before the add/drop deadline.

Grading

100 **A** assessment points per discussion, report, and presentation/video. Please note: The **A** assessment points count toward 30% of the overall grade.

9. Optional Postservice Activity

Activity

Students can join with a group of students during the following semester to develop and code a program based on the information gathered this semester.

Purpose

The purpose is to provide an additional way for the students to continue to help the community while giving them experience with programming, working in groups, communicating with others, etc.

Assessment

C, C++, C#, or Java program, or potentially done in some other programming language or using other components, e.g., HTML, JavaScript, etc.