

HOLLA # 6: Project Management - Critical Path Method

Creators: Jeff Landry, Professor, and Rosalind McCullough, graduate student

Subject: Project Management – Critical Path Method

Short description: The students will be introduced to basic project management concepts such as the project triple constraints of scope, cost, and time. Students will learn about the critical path method, used by project managers to plan a project's schedule. Students will start with a project's activity network diagram and then learn how to calculate the expected time to complete a project and identify the critical paths for a project. This HOLLA will allow the students to experience the Team-Based Learning approach that is used in several courses throughout our university. This will allow the students to work as a group to perform an activity applying the concepts being taught within the HOLLA.

Educational Level: 6-12

HOLLA type: workshop with combination of lecture/team activity

Educational Outcomes: By the end of the workshop (Part [n]), the student will be able to:

(Part 1) Given a list of project activities, arrange them in logical order.

(Part 2) Create a project network diagram by deciding which activities can be performed in parallel.

(Part 3) Identify and calculate the project's critical path.

Notes to instructor:

- The workshop is broken down into three parts.
- The ideal room is one where teams can gather, and that also has a chalk/white board and a projector.
- The exercises can be completed with pencil and paper, although the exercises can be adapted to use a software tool such as MS-Project or a smart board for drawing.
- A pocket folder is needed for each team, containing the list of activities and durations, the index cards of activities, the Readiness Assurance Test sheet and an IF-AT form.