

# Project Management

Some students have struggled with team based projects because (1) they have little or no experience organizing, planning, and managing a project; and (2) previous projects have had a project manager. This section is designed to help you overcome both of those challenges through four key steps.

## 1. Project Initiation

*Timing: as soon as team is formed.*

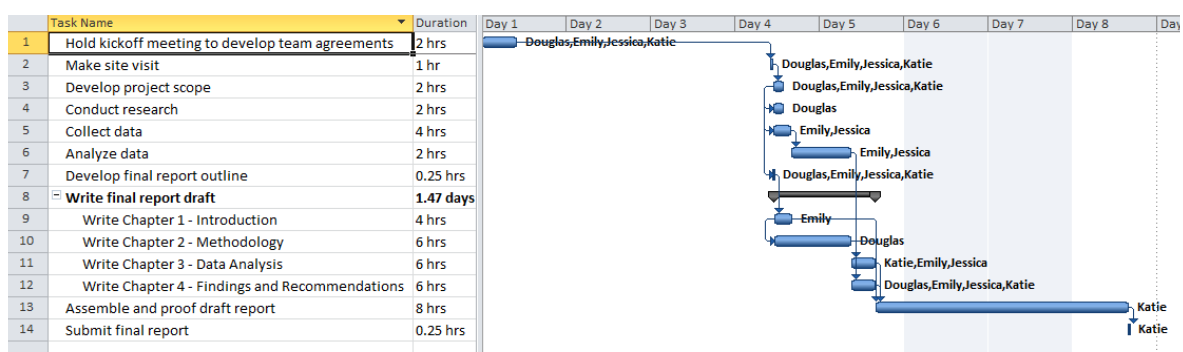
Project initiation is seen as a waste of time because it doesn't produce anything, so we tend to dive in and start work. Successful project initiation starts with a team meeting to get to know each other and discuss goals and expectations (see Group Logistics)

## 2. Project Planning

*Timing: As soon as the project is understood by the team.*

The first step is to discuss and agree on the project scope based on the assignment or meeting with your client or instructor. The scope is the boundaries of the project and everyone (client, instructor, team) must agree what is part of the project, and what is not part of the project. Only after you have agreed on the scope can someone facilitate a team process to develop a work plan. Using Post-It notes in a room with a large white or blackboard to:

1. *Develop a list of project tasks.* A task is anything that lasts more than an hour.
2. *Arrange the tasks in order of completion,* from top to bottom.
3. *Determine task dependencies.* Some tasks can happen simultaneously or may be dependent on completion of prior tasks. Rearrange Post-Its as needed, and draw lines to indicate task dependencies.
4. *Estimate time to complete each task.* Overestimate task duration and build in extra time. For example, editing a final report **always** takes longer than expected, so build in slack to meet deadlines.
5. *Assign a team member(s) to complete each task.*
6. *Look for resource conflicts or over allocations.* Is someone doing two tasks at once or unavailable?
7. *Take a picture of your project plan.* Recreate your plan in Microsoft Excel, or any of a number of web-based project management apps, for future reference. The example shown is from Microsoft Project.



### 3. Project Execution, Monitoring, and Controlling

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*Timing: As soon as work begins, until the final product is submitted.*

It is important that the team meets on a regular basis to discuss progress and any challenges that team members may be encountering. The work plan should be reviewed and discussed at every meeting, and adjustments made as needed to ensure that deadlines are met and they have met all the details of their assignment.

### 4. Project Closing

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*Timing: The last days prior to due date.*

This can be a time of high stress. Team members should maintain lines of communication and be ready to help each other to ensure successful project completion.

