Effective Project Planning and Scheduling

As project managers and leads, we all know how difficult it can be to accurately determine the duration of a project, yet that is exactly what is expected of us on a regular basis. This workshop will not disclose the secret of creating a perfect schedule, because there isn’t one. However, it will provide the factors and fundamental elements that you should consider and address when creating any type of schedule.

Participants should complete the Intermediate Project Management workshop prior to this course, or have equivalent knowledge. This course presumes that participants:

- Can define projects and project management
- Understand a project’s life cycle
- Are familiar with the basics of project planning and scheduling
- Know how to complete a Statement of Work and/or a project charter

At the end of this workshop, participants will be able to:

- Define and create a Work Breakdown Structure
- Identify and understand task relationships
- Estimate task durations and determine project duration
- Construct a network diagram
- Calculate the critical path of a project
- Use the Program Evaluation and Review Technique to create estimates
- Plan for risks
- Create a communication plan
- Effectively allocate project resources
- Update and monitor the project schedule

Workshop Format: 2 days (8:30am – 3:30pm)

Course Outline

Introduction and Course Overview
You will spend the first part of the day getting to know participants and discussing what will take place during the workshop. Students will also have an opportunity to identify their personal learning objectives.

Projects and Schedules
To begin, participants will review what a project is and why schedules are so important.

The Work Breakdown Structure (WBS)
This session will teach participants what a Work Breakdown Structure is, what its role is, what formats and numbering can be used, and the process to create one. Participants will then create their own WBS for taking a camping trip.
Estimating Activity Durations
Next, participants will receive tips on how to estimate the length of each task and the project.

Estimating
Case Study In this session, participants will perform task estimations for their camping trip project.

Identifying Task Dependencies
In this session, participants will learn key definitions and the four types of dependencies. Participants will also complete two exercises to give them some hands-on practice.

Aligning Resources with Activities
Next, participants will learn about resources, Resource Breakdown Structures, resource scheduling, and resource levelling. Participants will then complete a case study.

Project Planning
To begin the second day, participants will learn how to create network diagrams, use the Critical Path Method and the Program Evaluation and Review Technique (PERT), and create Gantt charts. Participants will go through the full Critical Path Method to create a network diagram with earliest and latest start and finish times and slack.

Scheduling Software
In this session, participants will discuss the benefits and disadvantages of using project management software.

Uncertainty and Risk Management
Whether we choose to address it or not, there is some form of risk in every project we undertake. This session will give participants some ways to manage risk.

Communication
This session will explore the four key elements of any communication and give participants a framework for communicating with various project team members. Participants will also complete a communication plan.

Creating a Viable Schedule
Each of the previous topics will come together in this section to create a workable schedule. Participants will also brainstorm solutions for common scheduling problems.

Updating and Monitoring the Schedule
To wrap up the course, participants will receive some tips on schedule management.

Workshop Wrap-Up
At the end of the second day, students will have an opportunity to ask questions and fill out an action plan.