



## **Project Management 101 - BBB (Borrow)**

*Practical Project Management: Learning to Manage the Professional* by Gerald. W. Cockrell

Reviewed by Nick Sands

At some point most engineers will have to led a project. They may think they know how to lead a project, but chances are they have never taken a course or read a book on how to run projects. They use their own prior project experience. Today there are many good resources available on project management. Dr. Gerald Cockrell's introductory book on project management, *Practical Project Management: Learning to Manage the Professional*, references much work from the Project Management Institute, the organization that certifies project managers. Cockrell has been at Indiana State University for 23 years and currently teaches the ABET accredited Master of Science Electronics and Computer Technology (MSECT) program, a distance learning program focused on instrumentation and automation.

The first chapters of the book are an introduction to project management, the five phases of a project, and costs. The mantra of the book and the project manager is "a successful project is completed on time, within budget, and at acceptable levels of quality and technology". The project manager uses the project scope, plan, schedule and budget through the initiation, planning, execution, controlling, and closing phases of the project. Cockrell gives examples of several tools like WBS, CPM, PERT, and Gantt charts. The different types of costs and how to develop an estimate development are also discussed.

The next several chapters deal with the role of the project manager. Cockrell starts with an interesting section on the different schools of management, then contract basics, negotiation techniques, and the relationship of the project manager to employees. This leads to a much longer section on project team building and leading successful project teams. This leads to a discussion on the role of the project manager and how to be successful in that role, including tips on motivating employees, making decisions, and solving problems. Further tools like time management techniques, effective meeting techniques, and project management software are also discussed.

The last chapter covers project closing. There are successful, unsuccessful, and terminated projects. The closing is important to evaluate the project, the project team, and the project team manager. Learnings from projects, especially unsuccessful projects should be documented to prevent repeating the same mistakes on future projects. The appendices include examples of many of the documents discussed through the book.

Cockrell provides a nice overview of project management, with enough information to provide some help to a project manager and point them in the direction for more information. Much of the advice makes sense intuitively, but it is reinforced in writing. The graphics are very simplistic, almost humorously so. Project management skills are almost universally needed so *Practical Project Management*, available from ISA for \$53 (member price), is a good book to read, but since it is more of an overview than a reference it may be better to borrow (BBB) than buy.