

Project Management versus University Classes

by Jim Davis

University shares many common characteristics with Projects. This paper takes a look at some of the similarities and differences, You will see that some understanding of projects can help you understand how to control your work in a semester. I will use the three common problems of projects as a framework for our comparison. These three characteristics are interrelated. Preventing one or two can trigger the third. Please read the Project Management article first!

Late Finishes

Project work and University semesters differ somewhat in how they handle their starting and ending times. The starting time of a project is determined by factors relating to the nature and planning of the project. A project's ending time is determined by the longest sequence of dependent events – the Critical Path.

Semester starting and ending times are set by the Academic Calendar to accommodate 3 or 4 terms a year. Thus, unlike a project, which can have a late finish, a semester can never have finish late! The only exception to this is the I grade which effectively postpones the end of the semester for one student for one course. Instructors and Administration are not fond of incomplete grades!

Budget Overruns

While projects can and often do run over budget, governments do not permit universities to increase student fees after the fact. So there can not be cost overruns to a student for any semester in university! To handle cost overruns universities maintain contingency funds.

Compromising Quality

Occasionally, an instructor of a university class may alter the amount of material covered in a particular semester. It is unusual, but there are some legitimate reasons why this can happen. This is an example of how an instructor can compromise the quality of a class.

A far more common example occurs when a student elects not to do a required task, for example a lab or an assignment in a class. (Graded tasks are more critical but even tasks that have no grade attached can affect a student's understanding of the course material.) The quality of the class is not compromised, but both the quality of the educational experience, and the grade for the student is compromised! The tradeoff is obvious, the student takes a lower mark for the course than they otherwise would have, by not doing some of the required work, not completing it on time, or not doing it up to standard.

Since the previous two problems of projects are not usually transferred to university work, the only possibility that remains is to compromise the quality of the work. This is be a major problem for any student who follows this course of action. The key to preventing this problem is discussed in the next section.

Tasks

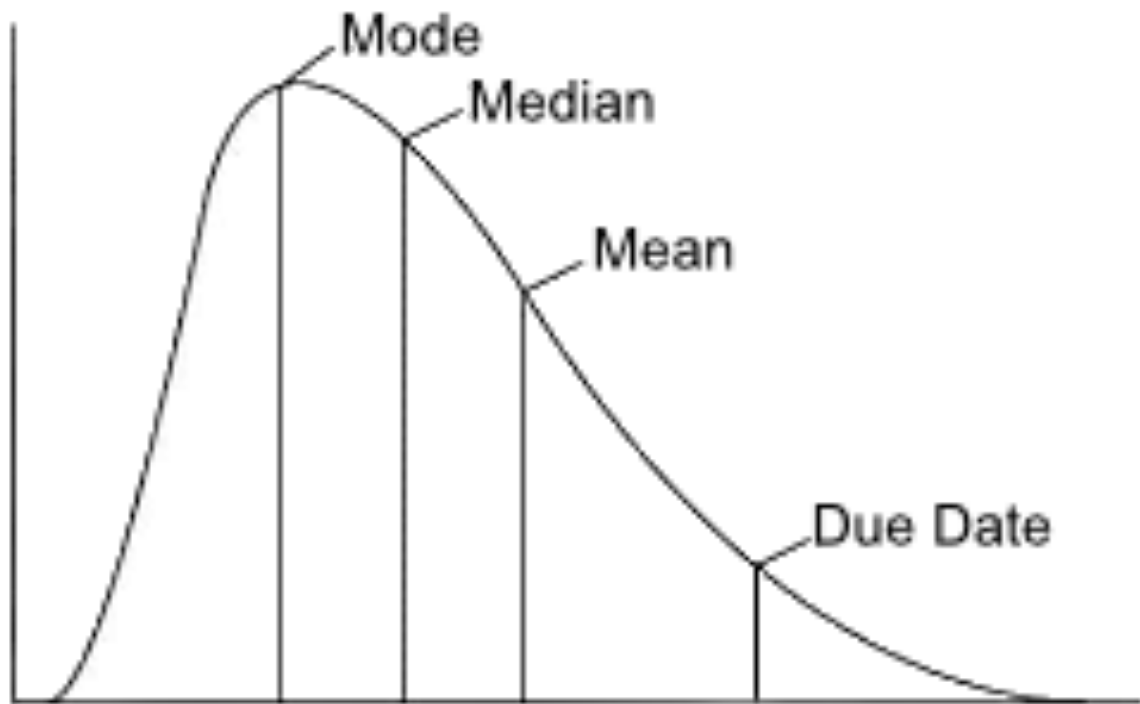
Unlike semesters, which cannot finish late, it is very possible for a task to be finished late. Let us take a close look at why this happens. The following diagram show a typical time distribution for performing a task. The x-axis is time, the y-axis is Probability of Completion.

Task Curve

There is a minimum time a task may take, but effectively there is no maximum time! Maximum time depends on how long the task gets strung out. Consider what can happen to delay the completion of any given task. It comes down to basically three things:

- **Participant syndrome** – A typical example is where an instructor tries to assign something with a short time fuse. If students consider the due date too close, they usually fight for more time to do the assignment. However, once they have what they consider to be adequate time, **they do not start the project immediately because they believe they have enough time.**

They have built in sufficient safety so they think that a short delay will not cause a problem. However, if anything unexpected occurs (remember the core problem of projects and university) they could be in trouble. **The central problem with any task is uncertainty.**



The Task Curve

This characteristic is also shared when university students are taking several classes as they normally do each semester. The problem is not whether a delay will occur, but when it will occur, what kind of delay, and how long the delay will be. So the key question is: where is the best place to have safety–spare time, at the beginning of the task (procrastination) or at the end (safety buffer)? Remember, the objective is to complete the task before the due date.

- **Multitasking** – Sometimes it is necessary to wait to finish a task but trying to do two things at once always delays all the tasks! Multitasking is almost always a mistake!
- **Complex tasks** – are those which have more than one component. These need to be planned carefully and any dependencies must be recognized and dealt with in the planning. Have you ever gone to the library to get a book you need for a paper and found that the book is checked out and is not due to be returned for at least a month, or

more? This is a dependency. If you really need the book you might just be plain out of luck!

Since many people don't start tasks early, starting a task as soon as possible is the best way of avoiding a late finish of that task! **Starting a task late is an invitation to disaster. If you delay and anything goes wrong—if there is any other delay—you will finish late!**

Furthermore, when one task is done, or if a task is delayed, then we should start on the next highest priority immediately. Keep working on the highest priority task that can be worked on, at all times!

If you come and ask me for an extension, I will know that you haven't understood, or paid sufficient attention to this paper!

Deadlines

Many students use deadlines to prioritize their work. However, if it is Monday and you have three assignments which must be completed by Friday—the deadline, and you figure you only have sufficient time to complete two of the tasks you now have to decide which assignment will not be done and therefore which marks you are willing to sacrifice. You should have started one or more of those tasks before that Monday. Organizing your work by using deadlines will often cause you to have to sacrifice marks in one course or another. **Don't use deadlines!**

A much better way to organize your work is to **plan** and **prioritize** each assignment as soon as you receive it. If something comes up which delays completion, you have the time, because you have built in safety. This usually results in getting your tasks done early and therefore you will seldom have to sacrifice marks. Completing all your assignments on time usually translates into better marks in your courses and a higher cumulative GPA.

Focus

Amazing things have been accomplished by some people, and one of the common threads running through such accomplishments is people's ability to focus their efforts. Focus is a major factor in accomplishing

anything. Most of us can focus our attention so as to accomplish amazing things, but generally speaking most of us can only maintain such focus for a short period of time. So the real question becomes how do we refocus after our attention has been diverted from something we want to accomplish.

That is where the structure of taking a university class comes in. It is scheduled to meet for 3-5 times a week. Each time it meets, it invites those who attend to refocus on the subject matter under study. When compared to correspondence courses, university classes are phenomenally more effective in learning a topic. Why? Those who have studied these two methods of learning note the power of regularly meeting in a class. It is is very powerful. This is one of the main factors in why attending classes is so important. It allows us to refocus our attention to the subject of the class.