NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY

PRESCRIPTION: PM600 PROJECT MANAGEMENT

AIM OF MODULE:	Students will gain an understanding of the requirements of project planning and control and be able to apply this knowledge to project management tasks, with an emphasis on system development projects.
CREDITS:	7
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2004
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level R	C	A	P	Suggested Assessment Percentage
1. Planning Projects Scheduling		*			10
2. Controlling Projects		*			10
3. Project Management Software			*		20
4. Case Study				*	60
					100

LEARNING OUTCOMES

The Student will:

C	1	Describe how to plan a project using appropriate work breakdown mechanisms to create phases, tasks, and milestones, and allow for contingencies which arise during a project's life cycle.
C	2	Control projects by converting task estimates into detailed project schedules and develop appropriate reporting and progress review mechanisms.
A	3	Gain a thorough knowledge of computerised project management software in order to be able to assist users to make use of the software.
P	4	Create a detailed project based on a given case study scenario.

CONTENT

1 PLANNING PROJECTS

- Recap the Systems Development Cycle, with more emphasis on the practical application of the life cycle as a means of enabling planning.
- Explain the importance of breaking down projects into manageable phases and milestones for both planning and control purposes.
- Explain how to break down into tasks and how to develop reasonable estimates for each task, including the use of formal estimation techniques such as function point analysis, lifecycle resource distribution.
- Explain the importance of and the methods of planning for problems that arise during a project life cycle.

2 CONTROLLING PROJECTS

- Describe how to convert task estimates into detailed project schedules; explain the importance of scheduling as a planning tool.
- Explain project reporting and formal progress reviews as a means of controlling projects. Explain the use of project management software in this process.

3 PROJECT MANAGEMENT SOFTWARE

- Describe the concept of networks.
- Outline the components of network diagrams, and draw such diagrams for a project.
- Calculate the critical path for the above network.
- Calculate the total and free float for the above network.
- Describe the effect of the network on resource allocation.
- Give an overview of available Project Management Software Packages.
- Use a project management package to produce:
  - schedules showing critical path (time analysis).
  - management reports showing the effects of time/resource constrained networks.
  - management reports showing cost analysis and financial spread through the project.
  - Changes to the network by varying resources and activity durations.

4 CASE STUDY

- Conduct a case study and, using the project management package:
  - prepare a plan
  - estimate activity duration using formal estimation techniques
  - estimate resource requirements
  - estimate resource costs
  - calculate project duration and cost
  - produce project schedules
  - produce management reports as the project progresses
  - adjust the plan when changes occur

NOTE

- The case study should emulate a real world business situation with all events pre-defined by the tutor.