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

PRESCRIPTION: IN600 WEB SITE DEVELOPMENT

AIM OF MODULE:	To provide the student with the skills needed for design and development of World Wide Web and Intranet Sites.
CREDITS:	7
KNOWLEDGE ASSUMED FROM:	IN500 Internet
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2008
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level R	C	A	P	Suggested Assessment Percentage
1. Information storage on the WWW		*			5
2. Legal issues		*			5
3. Web page design			*		35
4. Web page construction using HTML			*		35
5. Use of images, sound and video			*		10
6. Introduction to web programming			*		10
					100

LEARNING OUTCOMES

The student will:

C	1	Explain the requirements for storing information on the WWW.
C	2	Explain the legal issues involved.
A	3	Design effective web pages.
A	4	Construct XHTML and CSS based web pages.
A	5	Apply the use of images, sound and video effectively on web pages.
A	6	Apply web programming techniques to create non-static (dynamic) web pages.

CONTENT

1 INFORMATION STORAGE ON THE WWW

- Client-Server distributed information systems. (e.g. WWW and its variants)
- Integrity of information on the web, comparisons with the print media and the editorial processes of refereeing and peer review.
- Secure transactions, transfer of sensitive details including:
  - logins
  - passwords
  - credit card numbers etc.
- Putting WWW in perspective.
- Dealing with current issues concerning the distribution of information via the Internet.

2 LEGAL ISSUES

- Legal issues such as:
  - copyright
  - privacy act
  - libel
  - fair use

3 WEB PAGE DESIGN

- Web page design issues such as:
  - button bars
  - site maps
  - hierarchical organisation

- Document design and style including ergonomics vs economics & good design concepts/aesthetics, of a single page and a suite of pages.

- http: properties of; header fields; transfer methods; http-ng and emerging technologies.

- Audience identification and modifying design to meet audience needs and perceptions.

4 WEB PAGE CONSTRUCTION USING HTML

- Current markup languages in general. (e.g. HTML, XML, XHTML).

- HTML: frames, tables, forms, layers, scripting and multimedia inclusion.

- HTML authoring forums.

- HTML authoring tools.

- XHTML authoring tools.

5 USE OF IMAGES

- Use of images, common image formats (e.g. gif, jpg, png), image alignment and scaling.

- Use of sound and video.

- Special types of gifs including:
  - transparent
  - interlaced
  - animated gifs

- Image compression issues.

- Image maps.

- Tools for image manipulation.

6 WEB PROGRAMMING

- Scripting.
- Inclusions.
- Other current programming environments such as asp, php, ssi, cgi, java, perl, net.