PNGARNet

PNGARNet: Educational & Other Benefits
Georgina Valuka

DWU - PNGUpdate – 15th April 2008
PNG Academic and Research Network
Broadband Internet access for Universities and Research institutes
Websites

• Students and staff to host own websites
• Student Portal expanding Internet access
• Online surveys for researchers
Videoconferencing Technology

- Discussion between collaborative researchers
- Planning for joint projects – reduce travel costs to meetings
- Replication of an instructional environment in distant locations
- Education for those unable to travel
- Linking diverse sectors – Government and academia
Real classroom conditions replicated in distant locations
Videoconferencing

- Collaboration between universities in offering common units
- Better use of specialist staff
- Cross accreditation between universities
E-Learning Course Management: Moodle

• Post lecture notes electronically
• Send administration messages
• Receive and return assignments
• On-line testing
e-learning @ Divine Word University: Courses

dwu-elearning ★ Course categories ★ Department of Information Systems

Course categories: [Department of Information Systems]

Courses

- IS 104 Computer Mathematics
- IS 113 Introduction To Spreadsheet Management
- IS 117 Introduction to End User Computing and Word Processing
- IS 208 Mathematics for Computing 2
- IS 301 Procedural Programming (C++)
- IS 309 Financial Modelling
- IS 402 Electronic Commerce
- IS 406 Research Project
- IS 408 Decisions Support Systems
- Introduction To Database Management
- Introduction To Networking
- PC Architecture

Add a new course

[Department of Information Systems] Rename

Search courses

Moodle Docs for this page

You are logged in as Dr. Peter Anderson (Logout)

Home
Weekly outline

- News forum
  - IS 117 Unit Outline

5 February
- 11 February
- Operating a computer
- Mouse Tutorial

12 February
- 18 February
- Network and Internet

19 February
- 25 February
- What is an input?
- Input Devices
- Output Devices
- Input/Output Devices

26 February
- 4 March
- Basic Storage Devices
- Processing Hardware
- Memory vs. Storage

5 March
- 11 March
- File Management in Windows

12 March
- 18 March

19 March
- 25 March

26 March
- 1 April
- 2 April
- 8 April

9 April
- 15 April

16 April
- 22 April

23 April
- 29 April

30 April
- 6 May
Weekly outline

18 June 24 June

Week 1: Hello and welcome to the IS104 website. You will find here information about the IS104 unit, as well as copies of lecture notes, tutorial sheets and assignment documents.

Please visit this site regularly as it will be continuously updated.

25 June 1 July

2 July 8 July

WEEK 3

Hello, this is week 3.

You can now download assignment 1. It is due in two weeks. A link has been created for you to submit your solutions.
Accessing Library Resources

- Single catalogue for all collections
- Alternatively access for all to catalogues supplied by each Institution
- Inter-library loans – avoid duplication of specialist resources
- Requested text data scanned and sent by email
- Shared access to full-text databases
Sharing resources with universities and research institutes
Use by OHE

- Data collection for compilation of statistics
- Publishing of student lists
- Administrative communications to all OHE institutions
- Location of database
- Single point of administration by OHE
Students Management system Database links with Office of Higher Education (OHE)

OHE can access student information and annual statistical reports from each Universities

Universities can Access to the OHE database to check the students Grade 12 Matriculation Forms (Final Results) etc.
Share global resources, PNGAR-Net
Distance Learning

I’m Esther Baleo Business Studies student at DWU. e-Learning is a great opportunity for me to learn from expertise around the world.

I’m Dr. T. Scarlett Epstein from UK, teaching PNG Studies Department, Divine Word University, Madang.

I’m Dr. Harry McAnnoel from Washington DC. Teaching online.

I’m Dr. Alan Hauguit from James Cook University teaching Health management Students, Divine World University.
Co-located Server Farm at Hong Kong NOC

• Remote administration from DWU IT Services
• Hardware maintained on-site
• Hardware Redundancy
• Clustering used to provide Load Balancing and Fault Tolerance
Network Operations Centre (NOC)

- NOC is a place to co-locate (for a fee) application servers, Web servers, communications equipment, security systems, system administrators, support personnel.
- NOC is designed to provide high availability, reliability, and scalability for mission-critical applications such as databases, groupware, email, 24/7.
Summary Benefits
Immediate Needs
- Email for all users
- Internet access for all users including access to full text databases.
- Students and staff to host their own websites
- E-Learning courseware (e.g. Moodle) availability 24/7
- Shared data stores and collaborations with other universities of the South Pacific

Mid-term Needs
- Real-time videoconferencing
- Real-time online research capacity
- Access to super computer power
Advantages to all PNG OHE institutions

- Access to databases at reduced cost as consortium member
- Shared research projects and inter-institution partnerships
- Increased professional communications both within PNG and internationally
- Reduced costs to each institution
- Increased facility for PNG academics to be represented and active internationally
National benefits

Internet builds national capacity as follows:

- E-Learning centres for Government and non-government sectors
- Health online consultancies
- Services to Provincial centres
- Services to local communities
- Data gathering services (e.g. schooling, Police service)
Conclusion
Web Based E-Learning
✓ To supplement lecture room interactions

✓ Distance Learning
✓ On-line Learning
✓ Discussion Forums

✓ Application programs written in Java that most Web browser can read

Creative use of technology can be used to do:
  a. Aid labs more efficiently
  b. New tasks yet to be discovered

Eventually used to improve education, given appropriate bandwidth
✓ Makes resources available to more students
E.g. Those who are notable to attend classes.

Location transparent to user

Web Server on Local Intranet
Database Server
Application Server
Or Co-located with ISP or ASP

Port data collect resources
✓ Course materials
  ▶ Schedules
  ▶ Lecture notes
  ▶ grades
  ▶ Announcements
  ▶ exams

Port Resources collect data

Moodle: Modular Object-Oriented Dynamic Learning Environment

To supplement lecture room interactions

Form E-Learning community

Lecture using applications software anywhere in the world

Student using Web Browser anywhere in the world
Eg. Mobile Learners

Other students

E-Learning through Video Conferencing

Blackboard
Web CT
Moodle
Open source course management system