INFS 2005 INTRODUCTION TO HEALTH INFORMATICS (WSTC)

Credit Points 10

Legacy Code 700258

Coordinator Frank Gutierrez (https://directory.westernsydney.edu.au/search/name/Frank Gutierrez/)

Description This introductory unit aims to give the student an insight into the key knowledge and skill set required in the emerging domain of Health Informatics. Critical topics include: The Australian healthcare system, health care improvement modelling, health information systems and management, paper-based v's electronic health records, clinical documentation and data quality, health information management, consumer information security, privacy and ethics, decision support and clinical delivery support systems, healthcare data representation and interchange standards, telehealth and ICT technologies. This will be complemented by practical exercises and assessment support sessions. Through these experiences students will gain an understanding of the application of ICT to the healthcare domain and the skills necessary to play a pivotal role in the design and delivery of healthcare systems and health information management.

School Computer, Data & Math Sciences

Discipline Systems Analysis and Design

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Equivalent Subjects INFS 2004 - Introduction to Health Informatics

Restrictions Students must be enrolled at Western Sydney University, The College. Students enrolled in the Extended Diploma programs must have passed 40 credit points in order to enrol in this subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year 2 subjects.

Learning Outcomes

On successful completion of this subject, students should be able to:
1. Describe the fundamental aspects of the Australian healthcare system and the application of ICT to healthcare
2. Describe the different standards for health data representation and interchange
3. Apply technical skills in healthcare data modelling
4. Explain the current status of health record data capture and storage (paper v's electronic) and the importance of data quality and clinical documentation to patient safety and quality
5. Describe the impact of electronic health records on health informatics and healthcare delivery
6. Summarise the different types of patient administration and health information systems available within various healthcare settings including Hospital, primary care and community/allied health
7. Describe consumer issues and professional governance matters applicable in the Health Informatics domain including data security and privacy
8. Identify opportunities for the use of Telehealth/Telemedicine
9. Describe the domain of health information management, and the foundational concepts associated with disease classification and terminologies
10. Describe the issues associated with indigenous cultural safety relating to health system designs, functionality and use

Subject Content

1. Introduction to the Australian healthcare system
2. Review of fundamental aspects of Information and communications technologies applicable to healthcare
3. Purpose and use of health information
4. Paper based vs electronic health information
5. Consideration of the impact of Electronic health records and associated issues including privacy, security and usage
6. Types of patient administration and health information systems available within various healthcare settings including Hospital, primary care and community/allied health
7. Introduction of Healthcare data modelling methods and patient journey modelling
8. Consideration of the impact of clinical documentation and data quality on patient safety and quality
9. Review of Australian and International approaches for health data representation and interchange
10. Supporting healthcare information systems including clinical information systems, databases and decision support systems
11. Exploration of theoretical foundations in the application of Telehealth/Telemedicine
12. Consideration of Informatics professional roles and governance and consumer issues in health informatics
13. Exploration of Health informatics in research and evidence-based practice
14. Overview of health information management and its role within a healthcare setting

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Assignment 1 – Research Report Diagrams to be included	6-8 pages 3000 words	30	N	Individual

Assignment 2 – Modelling Submission Predominantly diagrams = 1000-2000 word report. Students are required to make equal contributions to the Group Assignment. (Failure to contribute equally to the group assignment may be reflected in a lower mark than for their team members)	6-8 pages Diagrams + 2000 words	30	N	Group
Final Examination Written short answer test.	2 hrs	40	N	Individual

Teaching Periods