# ENGINEERING AND SCIENCE

#### DR ALEX STOJCEVSKI FACULTY OF HEALTH, ENGINEERING AND SCIENCE

VU FORUM 22 May 2009





# NURSING AND MIDWIFERY

#### **BIOMEDICAL AND** HEALTH SCIENCES

### ENGINEERING AND SCIENCE





# NURSING AND MIDWIFERY







# NURSING AND MIDWIFERY

- The newly re-furbished nursing *simulation laboratories*, houses state of the art equipment and technology that incorporates the facilitation of video recording from multiple fixed cameras and video streaming
  - This allows students to participate in simulation activities in an inpatient setting, beyond beginning levels with exposure to a range of commonly seen practices, procedures and patient conditions
- To also enhance our student's learning experience, we have incorporated into the new curriculum the '*Flexible Clinical Model*'.
  - This model allows students to partially set their own shifts for clinical placements. It enables students to work alongside expert clinicians, while at the same time, offer opportunities of exposure to students of the nature and challenges of nursing during a night and over the weekend shift.





### **BIOMEDICAL AND** HEALTH SCIENCES











### **BIOMEDICAL AND** HEALTH SCIENCES

- Offers undergraduate and postgraduate courses which are relevant to the work environment.
- Student projects are performed in collaboration with industry, the community, government bodies and research institutes wherever possible.
- Teaching Clinics for Nutritional Therapy, Osteopathy at City Flinders and St Albans campuses





### ENGINEERING AND SCIENCE











# ENGINEERING AND SCIENCE

- The School of Engineering and Science prepares job ready graduates
- Research is a major part of all areas of this school
- Cutting edge equipment is available for all students as well as world recognised researchers in fields as diverse as mathematical inequalities, telecommunications, chemistry, biotechnology, project management and chip design.



# ENGINEERING

Produce graduates with competencies in:

Technical knowledge, Sustainability, Communication & Information literacy, Creativity, Interpersonal and teamwork, Problem solving, Business, Project management, Cultural perspectives.

#### PBL Framework which includes a **common 1**<sup>st</sup> **year (2010)**



Based on the following PBL Learning Principles

# ENGINEERING

#### VU ENGINEERING OUR CLASSROOM IS THE REAL WORLD





In year 1 students work on
 small **PROBLEMS** to achieve the <u>Fundamentals</u>

In years 2 & 3 students work on **PROJECTS** which could be <u>community and/or industry</u> based

> Year 4: Engineering **PRACTICE** on <u>Industry</u> Projects



#### PROBLEM (FUNDAMENTALS) PROJECT (COMMUNITY) PRACTICE (INDUSTRY) BASED LEARNING

(P<sup>3</sup>BL)

# SCIENCE

**Bachelor of Science (Specialisation)** 

#### Specialising in:

- Biotechnology
- Chemistry
- Ecology & Environmental Management
- Choice of supporting studies from health, engineering, science, arts, business and law
- Students can choose double specialisation OR single specialisation
  with supporting studies







#### **Biotechnology**

Scientific research (eg. government/university/hospital laboratories), forensic science (eg. DNA profiling), industrial biotechnology (eg. Biofuels)

Forensic biologist						
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#### Ecology & Environmental Management

Landcare/bushcare coordinator, environmental manager, restoration ecologist



#### Chemistry

Analytical chemist (government & commercial), forensic chemistry, industrial chemicals







# FOUNDATION STUDIES

- One year course that provides a pathway into other courses in the Faculty of Health, Engineering and Science
- We cater for students with no prior study in science, and offer an accelerated program for students who have previously studied science
- We focus on developing the knowledge and skills students need to succeed in other faculty courses





# **RESEARCH CENTRES AND UNITS**



- Centre for Telecommunication and Microelectronics (CTµE)
- Centre for Environmental Safety and Risk Engineering (CESARE)
- Food Marketing Research Unit (FMRU)
- Packaging and Polymer Research Unit (PPRU)
- Research Group in Mathematical Inequalities & Applications (RGMIA)







#### TODAY'S WORKSHOPS

#### Foundation Studies in Health, Engineering & Science

Function Room 1 11.15am – 11.45am Presenter: Mr Nick Athanasiou

#### **Problem Based Learning in Engineering**

Function Room 2 11.55am – 12.25pm Presenter: Dr Alex Stojcevski

#### **Science Specialisation**

Function Room 4 11.55am – 12.25pm Presenter: Dr Domenico Caridi & Carol Scarpaci

