UNSW Open Day  
Schools’ Interactive Activities  
Saturday 1 September 2012

SCHOOL OF AVIATION  
Flight Simulator in room 225 and 226, Old Main Building map reference K15

UNSW Aviation has a purpose built general aviation flight simulator. The simulator comprises a replica training aircraft flight deck, complete with instrument panels (one flat panel display) and navigation equipment. Outside the flight deck, external images (scenery) are projected on a 180 degree curved screen, immersing the pilots in the simulation. The replica flight deck can simulate all single and twin engine training aircraft (i.e., Piper Warrior, Cessna 172, Navajo Chiefair) along with a number of twin engine commercial aircraft such as the Boeing 777 and Airbus A330. The flight simulator has an instructor console attached, permitting total control of the aircraft and its state (i.e., simulating engine or instrument failure and weather). The simulator is powered by four personal computers and flight simulation programs such as X-Plane are typically used for research (capable of running Microsoft Flight Simulator). Typical flight performance parameters captured include, although not limited to, airspeed, altitude, longitude, latitude, aircraft state, and pilots flight control inputs.

SCHOOL OF BIOTECHNOLOGY AND BIOMOLECULAR SCIENCES  
Science Lawn, map reference C14

Visit the School exhibit and explore the following:  
– Did you know that there are more bacteria living in you than there are your own cells? Come and see what some of them look like!  
– Do you watch CSI or other crime shows on TV? Do you ever wonder how they use DNA to solve those crimes? You can be the forensic detective in our crime scene and discover who stole the special ice cream. (You can also find out what special ice cream is!)  
– Have you ever seen DNA? Have you ever eaten DNA? What does it look like? Would you like to take some home in a special test tube? Today you can! Visit our display and make some DNA.

SCHOOL OF CHEMISTRY  
Science Lawn, map reference F12

Are you destined to develop the next anti-cancer drug? Do futuristic nano-devices amaze you? Chemistry is a highly creative science; it has a profound effect on our planet and is involved in nearly every component of everyday life. It is a central science that underpins many other sciences such as biology, materials science and nanotechnology. Find out more about how almost every new technological change and important discovery has a foundation in Chemistry – see us in action in our marquees.

SCHOOL OF MATERIALS SCIENCE AND ENGINEERING  
Science Lawn, map reference F13

The school, identified by ambassadors in bright orange T-shirts, will have an abundance of interactive activities and displays. There will be a model train running on super conductors, fuel cells to run a model car, an advanced alloy turbine blade from a jet aircraft, a sharkskin swimsuit and natural fibre composites. Questions about Materials Science, student life, and studying Materials Science and Engineering at UNSW will be answered by students and staff who will be coordinating the displays.

SCHOOL OF OPTOMETRY AND VISION SCIENCE  
Science Lawn, map reference F13

Come and see the Optometry and Vision Science exhibit:  
– 3D Computer Visualisations of Common Eye Conditions  
– Model Eye  
– Stereo Vision – how well do your eyes work together?  
– Ishihara Test – test your colour vision  
– Optical Illusions  
Find out about the Optometry Clinic on the UNSW Kensington campus and the services we offer.

SCHOOL OF PHYSICS  
Science Lawn, map reference F13

Physicists search for the laws which govern the behavior of the universe - from the smallest sub-atomic particles, to the largest galaxies. On Open Day come and view Earth’s nearest star – the Sun – through the solar telescopes. Explore the laws which govern the behavior of atoms. Meet with researchers from the Centre for Quantum Computation and Communication Technology and learn about their ground breaking work. Talk to students who currently studying physics at UNSW, or experiment with one of our many interactive displays. Find all this in our marquee on the main walkway!

SCHOOL OF PSYCHOLOGY  
Science Lawn, map reference F13

Psychology covers so many interesting and diverse areas it is impossible to list them all. Are you interested in behaviour, perception, learning, personality, memory, emotion, or social interaction? Take part in a range of interesting and unusual demonstrations. Come and find out about the fascinating world of Psychology and where a degree might take you.

CLIMATE CHANGE RESEARCH CENTRE  
Spin Tank Activity in room 560 and 570, Biological Sciences Building map reference D26

At the Climate Change Research Centre, we examine some weighty questions related to global warming, weather extremes and ocean circulation. At the heart of these topics lies an important question... does water spiral down the toilet in different directions on opposite sides of the equator? The motion of water and air - two fluids - do some weird things on a rotating planet. And in order to understand how the ocean and atmosphere both work, we need to understand the motion of water and air.

Come and find out more at our spin tank experiment! Session times listed below:  
10 – 10.30am; 11 – 11.30am; 1 – 1.30pm; 2 – 2.30pm; 3 – 3.30pm

Lectures

Bachelor of Science and Business – new offering for 2013  
Faculty Lecture  
10.50am | Biomedical Theatre A | E27

UNSW Science Bridging Courses  
Faculty Lecture  
11.30am | Biomedical Theatre A | E27

Science: Be informed. Explore the possibilities  
Faculty Lecture  
12.10pm | CLB Theatre 7 | E19

Advanced Science: Be informed. Explore the possibilities  
Faculty Lecture  
1.30pm | Biomedical Theatre A | E27

Careers in Aviation  
School of Aviation  
10.50am | Rex Vowels Theatre | F17  
1.30pm | Rex Vowels Theatre | F17

From birth to death: how molecular genetics and biochemistry makes us who we are  
School of Biotechnology and Biomolecular Sciences  
9.30am | Biomedical Theatre A | E27

Genetics – where we are and where we’re going  
School of Biotechnology and Biomolecular Sciences  
10.10am | Biomedical Theatre C | E27

Biology and Marine Science  
School of Biological, Earth and Environmental Science  
10.10am | Biomedical Theatre B | E27

Earth Sciences at UNSW  
School of Biological, Earth and Environmental Science  
1.30pm | Biomedical Theatre B | E27

Environmental Science, Ecology and Geography  
School of Biological, Earth and Environmental Science  
2.10pm | Biomedical Theatre B | E27

Chemistry – A Diverse and Expanding Science  
School of Chemistry  
9.30am | Physics Theatre | K14  
2.50pm | Physics Theatre | K14

Medicinal Chemistry – Chasing the perfect potion  
School of Chemistry  
11.30am | Biomedical Theatre B | E27

Nanotechnology – Science that Benefits Society  
School of Chemistry  
2.10pm | Rex Vowels Theatre | F17

Advanced Mathematics and Programs in Mathematics and Statistics  
School of Mathematics  
10.10am | Biomedical Theatre A | E27

Careers in Mathematics and Statistics  
School of Mathematics  
1.30pm | Biomedical Theatre C | E27

Materials Science and Engineering (including dual degrees)  
School of Materials Science and Engineering  
10.10am | CLB Theatre 2 | E19  
1.30pm | CLB Theatre 2 | E19

Medical Science  
School of Medical Sciences  
10.50am | Physics Theatre | K14  
1.30pm | Physics Theatre | K14

Optometry and Vision Science  
School of Optometry and Vision Science  
10.50am | Keith Burrows Theatre | J14  
2.50pm | Keith Burrows Theatre | J14

Physics and Astronomy  
School of Physics  
10.50am | Physics Laboratory Annex DWOI | K15  
1.30pm | Physics Laboratory Annex OM01 | K15

Psychology @ UNSW – A Science and a profession  
School of Psychology  
10.10am | Physics Theatre | K14  
11.30am | Physics Theatre | K14  
2.10pm | Physics Theatre | K14