

Science and Health- Tuesday 5 July

Morning sessions (11:15 am- 12:15pm):

- **Computer Sciences and Electronic Engineering** *Securing the Internet*. The Internet relies upon encryption and authentication to secure all our Internet financial transactions such as banking and online shopping. This talk will show how the authentication works, how to keep yourself safe online and a demonstration of hacking to show what could happen if the authentication is broken.
- Health and Social Care- Nursing (Mental Health and Adult)- TBC
- Life Sciences- Lab session: Determination of Vitamin C in fruit juice: In this practical lab experiment, students will
 work in groups to analyse different samples of fresh fruits juices, using titration to determine the amount of vitamin C
 present.
- **Mathematical Science** *Pure Mathematics*: Why does anyone study pure maths? What's it good for? This session will feature a hands-on activity that will get students thinking about a pure maths topic, while also discussing how there's no such thing as "maths for its own sake", and how thinking about questions "because they're interesting" can lead to vital breakthroughs in science and technology.
- **Sports, Rehabilitation and Exercise Science** *Applied sports therapy*: In this practical taster session, we will take you through some of the tools you might use in Sports Therapy practice. These will include using the SCAT5, an immediate on-field and off-field assessment tool for concussion and some of the rehabilitation equipment and techniques that you will be taught during the programme.

Afternoon sessions (13:00 pm- 14:00pm):

- Computer Sciences and Electronic Engineering- Introduction to web development: In this taster talk Dr Jon Chamberlain will outline the learning objectives and assessment for CE154 Web Development, a first year module for Computer Science undergraduate students. He will then take you through some of the actual lecture content, introducing concepts and code used in Web Development, why they are important to know and how they can be applied in the real world.
- Health and Social Care- What is Occupational Therapy?: An overview of Occupational Therapy as a profession including what occupational therapists do, which areas they work in and how diverse the profession of Occupational therapy is.
- Life Sciences- Marine Biology and Ecology: Tour of our brand-new Coral Reef Research Unit laboratories.
- Mathematical Science- How Not to Lose Millions: The Mathematics of Finance and Industry: This session will take look the mathematics that underpins modern finance, trading and insurance data analysis. You'll see some of the simple mathematics that builds up to model some of the most complicated financial instruments. Learning how to avoid falling into the red. This session is suitable for any students with an interest in the mathematical side of Economics or Finance as well as those interested in studying Actuarial Science.
- **Psychology** *Do you want to understand your place in the world*?: In this session you will have an opportunity to learn how psychologists study human behaviour and the brain!
- Sports, Rehabilitation and Exercise Science- Psychological Skills and Video Analysis Workshop: Part A (30-mins) In this taster session, we will conduct a short experiment to examine the effects an audience has on a (relatively) simple skill: basketball shooting. Will the presence of an audience contribute to an elevated level of performance, or will it create unbearable pressure and a drop in performance? Part B (30-mins) In this taster session, we will record and quantify sporting performance using our specialist video analysis software: APCapture.