

# **MATHEMATICS – GENERAL EDUCATION** MATHS 190/190G GREAT IDEAS SHAPING OUR WORLD

## THE LECTURING TEAM WELCOMES THEIR GUEST LECTURER

# IAN STEWART

### **Recent books**

#### MATHS 190 - Great ideas Shaping Our World

Letters to a Young Mathematician



letters to a young mathematician.



#### Why Beauty is Truth

Why Beauty Is Truth



This course is relevant and accessible to students in all parts of the University and can be taken either as part of a Science/Arts/Commerce degree, or to fulfil the UoA requirements for General Education. No formal Mathematics background is required, just curiosity about topics such as infinity, paradoxes, cryptography, knots and fractals.

Hidden in the heart of the theory of relativity, quantum mechanics, string theory, and modern cosmology lies one concept: symmetry - Ian Stewart

#### About our Guest lecturer

lan Stewart is a science writer, science fiction writer, and a professor of mathematics at the University of Warwick in England. To the general public, he is best known for his popular science writing on mathematical themes. He (co)-authored over 30 books that open the universe of Maths to non-mathematicians, including, most recently, Letters to a Young Mathematician and Why Beauty is Truth: The Story of Symmetry. In 1995 he was awarded the Royal Society's Michael Faraday Medal (1995) for furthering the public understanding of science. Ian Stewart scripted and presented several TV and radio shows and runs a maths popularisation podcast in the Univerity of Warwick website.

#### Research interests

lan Stewart's present research concerns the effects of symmetry on dynamics, with applications to pattern formation and chaos theory in areas including animal locomotion, fluid dynamics, mathematical biology, chemical reactions, electronic circuits, computer vision, quality control of wire, and intelligent control of spring coiling machines. He takes a particular interest in problems that lie in the gaps between pure and applied mathematics.

### Ian Stewart on University Mathematics

#### MATHS 190 lecturing team

lan Stewart **Guest Lecturer** 



Jamie Sneddon Course coordinator



Ivan Reilly Lecturer



A Bitters of Symmitte

Ian Stewart

#### Darwin's Watch



Mathematics is a very misunderstood and unappreciated subject. There is a widespread tendency to assume that what goes on at University level is just a continuation of what went on at school. Math at University level is much richer than that, with lots of surprises and interesting new ideas. It's intellectually challenging and exciting. Not only that: math lies behind the scenes in almost everything that we use or experience in our lives — mobile phones, Internet banking, satellite navigation for cars, making plane reservations, computer graphic images in movies, you name it.

Oh, and if your main ambition is to make money, a degree in math is a very good way to go. It will open the door to almost any kind of employment. There are guite a few math billionaires out there. But I don't want to tell you how to make money, I'm just pointing out that you can, if that's what grabs you. I also want you to appreciate that new math is being created every day, at around a million pages of really innovative stuff every year, and that the applications of math range across the whole of human activity. It's an active, very creative, exciting, and totally relevant subject.

Sepideh Stewart Lecturer



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