

Ethics in Maths

Tim Johnson

RCUK Academic Fellow in Financial Mathematics

Department of Actuarial Mathematics and Statistics, Heriot Watt University

Maxwell Institute for Mathematical Sciences

SMSTC workshop

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What is ethics?

the tireless aim of moral philosophy to make the world safe for well-disposed people

- Not really
 - “good” or “bad”
 - “right” or “wrong”
- More about things “working well” for non psychopaths
 - Not really relevant to you if you are a psychopath

I am not a Nazi, I am a mathematician

- Ethics is about getting things to work well for everyone
 - Morality and “mores” are connected
 - Ethics is “habit”
 - Ethics are the norms that help things along
- “Epistemic virtues”
 - The behaviours expected of you in your (professional) life
 - Why are they there?
 - Necessary or convention

Aims

- Introduce students to ethics with a focus on the relationship between mathematics and ethics.
- Develop students' capabilities to support their post-doctoral careers (academic or commercial).
- On completing the course, students will have a basic idea of ethics as well as understanding some of the concerns people have with the use of mathematics.

Audience

- Applied mathematicians who might be involved in social, as distinct from physical, systems
 - Artificial Intelligence/Machine Learning or finance
- Applied mathematicians who might be involved in policy formulation
 - such as bio-mathematics or climate modelling.
- Pure mathematicians interested in the culture of mathematics

Delivery

- Seminars and “podcasts”
 - I don’t think reading texts will help
 - The language will be a barrier
- Tried and tested
 - The syllabus is based on an MSc dissertation option offered to actuaries
 - With enhancements for non-actuaries/higher level

Assessment

- Each student will deliver a presentation of ethics as it pertains to their area of research
- Peer assessed
 - Planned 3 December
 - (might move back if appropriate)

Schedule

08/10/19	SEMINAR: Introduction to the course
9-28 October	SELF STUDY: Oxford Romp Through Ethics 1-3 SELF STUDY: In Our Time on Classical Ethics
29/10/19	SEMINAR: Review of ideas in podcasts
30 Oct-18 Nov	SELF STUDY: Oxford Romp Through Ethics 4-6 SELF STUDY: In Our Time on Modern Ethics
19/11/19	SEMINAR: Review of ideas in podcasts
20-25 Nov	SELF STUDY: Domain specific material
26/11/19	SEMINAR: Review and discussion of assessment
27 Nov-2 Dec	SELF STUDY: Presentation preparation
03*/12/19	ASSESSMENT PRESENTATIONS

MAC-MIGS RRI Course

- Linked but not that alike
 - I know Michael Baryani and will give one lecture in his course
- MAC-MIGS specific to MAC-MIGS
 - Applied
- Ethics in Maths
 - More generic/foundational

***WHAT ARE YOUR
QUESTIONS?***