MMSC
Modelling Case Studies

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Problem presentations

11:00 Introduction

11:10 *Fluorescence recovery after photobleaching* (Peter Howell)

11:25 *Problem 2* (Georgia Brennan)

11:40 *Optimising strategies for long-distance cycle races* (Matthew Shirley)

11:55 Break

12:05 *Exploring the seasonality and trends in respiratory diseases across different settings* (Jasmina Panovska-Griffiths – Teams)

12:20 *Estimating epidemic risks using branching process models* (Robin Thompson)

12:35 *Buffer size and quality of service* (David Allwright)

Group allocation

- Email ordered list of **at least 3** preferred problems to howell@maths.ox.ac.uk

- Deadline: **1pm on Wednesday 17 January**

- I will allocate students to groups and email to let you know.

- **If you don't make the deadline, then I will assume you are happy to be allocated to *any* of the problems.**

Group meetings

- You will have weekly one-hour group meetings with the project supervisor in **weeks 2-7**.

- The supervisor's role is to guide the group as they devise, analyse and solve mathematical models for the given problem.

- You will need to liaise with the supervisor to find a mutually convenient time-slot.

Group presentations

- Group presentations will take place **11am-1pm and 2-3pm** on **Monday of week 8 (4 March)**

- 11:05 Presentation 1
- 11:25 Q&A
- 11:30 Presentation 2
- 11:50 Q&A
- 11:55 Break

- 12:05 Presentation 3
- 12:25 Q&A
- 12:30 Presentation 4
- 12:50 Q&A
- 12:55 Break

- 2:05 Presentation 5
- 2:25 Q&A
- 2:30 Presentation 6
- 2:50 Q&A
- 2:55 Break

Individual project reports

- Each student is required to write up an individual report summarising the problem studied, the modelling attempted, and the results achieved.

- The deadline for submission is **29 April** (?? Kathryn to confirm!)

- From the course handbook:

    "the mark for the presentation makes up 20% of the final mark for this unit. The remaining 80% of the mark is for your individual written report."