

Structure of the course — A6 Differential Equations II

The course corresponds to 16 hours of lectures, over 8 weeks. All the video-lectures have been recorded in advance and are available online. Every week focuses on one section from the lecture notes. To improve the organisation of the material and to adapt it to an online format, the lectures of each week are organised into short videos. The list of videos and their associated sections follows:

Week 1 Second-order linear boundary value problems - Part 1. [Week1_1](#), [Week1_2](#), [Week1_3](#), [Week1_4](#)

Week 2 Second-order linear boundary value problems - Part 2. [Week2_1](#), [Week2_2](#), [Week2_3](#), [Week2_4](#)

Week 3 The Green's function. [Week3_1](#), [Week3_2](#), [Week3_3](#), [Week3_4](#), [Week3_5](#)

Week 4 Eigenfunction expansions. [Week4_1](#), [Week4_2](#), [Week4_3](#), [Week4_4](#)

Week 5 Power series solution of linear ODEs. [Week5_1](#), [Week5_2](#), [Week5_3](#), [Week5_4](#), [Week5_5](#)

Week 6 Special functions. [Week6_1](#), [Week6_2](#), [Week6_3](#)

Week 7 Asymptotic analysis - Part 1. [Week7_1](#), [Week7_2](#)

Week 8 Asymptotic analysis - Part 2. [Week8_1](#), [Week8_2](#), [Week8_3](#), [Week8_4](#)

This weekly schedule is just a recommendation and you should not hesitate to take advantage of the online format and to watch the video-lectures at your own rhythm, as long as you are ready in time to work on the 4 problem sheets (whose schedule is organised by your college tutors).

You are welcome to write to me at any time at lambiotte@maths.ox.ac.uk. Notice that all contact with me this term (HT 2021) will be exclusively by online communication.