Extremal Combinatorics – 2009/10

Course Information JRJ

Lecturer: Robert Johnson (email: R.Johnson@qmul.ac.uk, Room 154)

Timetable:

Tutorial:	Wednesday	1300–1400	Maths 513
Lecture:	Friday	1400–1600	Maths 203

Office Hours:

Monday	14:30 – 15:30	(weeks 1,2,3 only)
Wednesday	12:00 – 13:00	
Friday	12:30 – 13:30	

Assessment: 100% final examination

Prerequisites: Previous familiarity with graphs and sets is desirable. We will also use some basic probability and linear algebra. Other than this there are no prerequisites apart from mathematical maturity and a willingness to think.

Lectures: You must take your own notes in the lectures. I may provide printed notes for certain parts of the course after the lectures but these will not contain everything that is lectured and are not a substitute for your own notes. It is important that you spend some time between lectures reading over your notes and making sure that you understand them.

Coursework: There will be between 3 and 6 exercise sheets spread out through the semester. The exercise sheets will contain a mixture of routine examples and more challenging problems. It is essential for your understanding of the course that you make a serious attempt to do the problems. They will be discussed in tutorials, lectures or during my office hours.

Examination: Information on the final examination will be provided before the end of the course.

Books: The lecture notes will be self contained. Examples of books giving background material and further reading are:

- B. Bollobás, *Combinatorics*, Cambridge University Press, Cambridge, 1986.
- B. Bollobás, *Modern Graph Theory*, Springer-Verlag, New York, 1998.
- S. Jukna, *Extremal Combinatorics: With Applications in Computer Science*, Springer-Verlag, Berlin, 2001.

Course webpage: http://www.maths.qmul.ac.uk/~jrj/MTH711U/
All handouts and exercise sheets will be put on the webpage.