

Representations of Finite Groups

Instructor: [Jason Bell](#)

Syllabus We'll cover (not necessarily in this order) subrepresentations and irreducible representations, tensor products of representations. Character theory. Representations as modules over the group ring, Artin-Wedderburn structure theorem for semisimple rings, Induced representations, Frobenius reciprocity, Mackey's irreducibility criterion, and additional topics.

Textbook: Serre's *Linear Representations of Finite Groups*.

In addition, I will also be providing a pdf of my lecture notes.

Coursework and Grades: Grades will be based on individual homework assignments (50%) and a final exam (50%).