

MA 3823 Group Theory

WPI B Term 2016

Class Time: MTRF 12pm Stratton 304

Conference: W 12pm Stratton 304

Professor: Padraig Ó Catháin, PhD (pocathain@wpi.edu)

TA: Tyler Reese (tmreese@wpi.edu)

Office Hours: TBA

Text: J. A. Gallian, Contemporary Abstract Algebra, 9th Ed. (2016)

Abstract: This course provides an introduction to one of the major areas of modern algebra. Emphasis will be placed on mathematical rigour, and on deriving proofs directly from axioms where appropriate. Topics covered include: groups, subgroups, permutation groups, normal subgroups, factor groups, homomorphisms, isomorphisms and the fundamental homomorphism theorem. Recommended background: MA 2073.

Grading Criteria:

Midterm Exam (20%) To be held during week 4

Final Exam (30%) To be held during week 7

Homework (40%) Five assignments, best four count

Participation (10%) Attendance and engagement in class and conference is expected

Homework Policy:

Assignments will be distributed in class in hard copy. Soft copies will be posted on Canvas. Bonus problems need not be submitted, though students are strongly encouraged to engage with these problems in conference and office hours. Group work is encouraged, but each student should write up their work independently, and all submitted work should be the result of individual thought. Copying or near-identical homework submissions will not be acceptable. Homework will be due at the beginning of class on Tuesday, and solutions will be discussed in conference on Wednesday.

Other expectations:

The academic honesty policy can be accessed at:

<https://www.wpi.edu/about/policies/academic-integrity/student-guide>

Students are expected to abide by this policy, and to observe standard classroom etiquette.

Students with Disabilities:

Contact the Office of Disabilities Services (ODS) so appropriate accommodations can be implemented.

E-mail: disabilityservices@wpi.edu, in person: Daniels 124 or 137, or by phone: x-4908.

Please inform the instructor early in term of any special requirements.