## **COURSE SPECIFICATION FORM** for new course proposals and course amendments

Department/School:	Mathematics	Academic Session:	2020-21
Course Title:	Group Theory	Course Value: (UG courses = unit value, PG courses = notional learning hours)	15 credits
Course Code:	MT3860	Course JACS Code: (Please contact Data Management for advice)	G100
Availability: (Please state which teaching terms)	Term 2	Status:	Optional Condonable
Pre-requisites:	MT1810 and MT1820	Co-requisites:	-
Co-ordinator:	-		
Course Staff:	-		
Learning Objectives	This module introduces students to group theory, which is one of the central fields of modern mathematics. Students will meet standard algebraic notions, such as substructures, homomorphisms, quotients and products. Groups are important tools in mathematics used to describe symmetries of any mathematical object, and this will be emphasized throughout the module.		
Learning Outcomes:	By the end of the module students will understand and be able to apply the fundamental concepts of group theory; recognize and construct group homomorphisms and quotients; know basic examples of groups and group actions.		
Teaching 9 Learning	30 hours of lectures.		
Methods:	120 hours of private study, including work on problem sheets and examination preparation. This may include discussions with the course leader if the student wishes.		
Key Bibliography:	Introduction to Algebra - P.J.Cameron (Oxford Univ Press) 512.11 CAM A First Course in Abstract Algebra with Applications J.J. Rotman (Pearson Prentice Hall) 512.02 ROT The Theory of Groups: an Introduction J.J. Rotman (Springer) 512.51 ROT		
Formative Assessment & Feedback:	Formative assessment in the form of 8 problem sheets. The students will receive feedback as written comments on their attempts.		
Summative Assessment:	Exam: A two hour written exam: 85%. Coursework: Set exercises: 15%.		

Updated December 2019