

**Lecturers**

Paul Hafner (weeks 1–6), Room 419, Ext 85748 ([hafner@math.auckland.ac.nz](mailto:hafner@math.auckland.ac.nz))

Office Hours: Monday and Thursday, 10.30–12.30

Steven Galbraith (weeks 7–12) Office Hours: to be announced

**Web Page for this course:** <http://www.math.auckland.ac.nz/class714>

All course information and materials will be available through this site.

**Course Summary:** An overview of basic methods and results in number theory will be given. The material covered will include classical topics such as divisibility, prime numbers and their distribution, linear and quadratic congruences, as well as excursions to additive, geometric, algebraic, and analytic number theory.

**Resources**

Lecture handouts will be given out at the beginning of each lecture. For additional reading the following may be considered:

G. E. Andrews, *Number Theory*, W. B. Saunders Company, 1971.

G. A. Jones and J. M. Jones, *Elementary Number Theory*, Springer, 1998.

I. Niven, H. S. Zuckerman, H. L. Montgomery, *An Introduction to the Theory of Numbers*, Wiley, 1991.

**Assignments:** There will be four assignments with due dates

**August 8, August 29, October 3, October 17.**

Assignment scripts will be collected in class.

**Assessment** will be based on assignments (25%) and the final exam (75%), OR on the final exam (100%), whichever is higher.