

K-THEORY: GUIDE TO CONTENTS

JOHN JONES
UNIVERSITY OF WARWICK

Part 1 : Core theory.

- (1) Vector bundles.
- (2) The Grothendieck ring of vector bundles.
- (3) First computations.
- (4) Bott periodicity.
- (5) K-theory.
- (6) Further calculations.
- (7) Operations in K-theory.
- (8) Hopf invariant one.

Part II: Additional topics. This part of the course will cover some of the more advanced topics in K-theory. Here are some possibilities – there may well be others.

- (1) Vector fields on spheres.
- (2) The beginnings of algebraic K-theory.
- (3) More topological applications of K-theory.

Assessed work. There will be assessed work – details will be discussed in the first lecture.