

**Algebraic Topology IV 2004**  
**Information for students**

**1. What is in the course:** What will be in the course will depend on the answer to the question 'Who knows what a differential form is ?' which I will ask in the first lecture. Assuming that the answer is everybody or at least everybody who wants to take the exam the course will cover: Homotopy theory, de Rham cohomology and, if time, the theory of line bundles and Chern classes.

**2. References:** If the answer to the question above is yes then the main text will be:

*Differential forms in algebraic topology* Raoul Bott, Loring W. Tu 514.745 B751d.

There are two copies on short loan in the library. If you are thinking of going on in mathematics or physics and looking to buy a text I would highly recommend this book.

There are also lots of other books in the library on algebraic topology.

**3. Lecture times:** Tuesday and Wednesday at 10.00 in EMG06.

**4. Email and the web:** I will use email a lot. I will collect email addresses in the first lecture and I will assume that you are **receiving** and **reading** my emails.

Anything I handout which is printed will be on the course web page at <http://www.maths.adelaide.edu.au/people/mmurray/at04/at04.html>.

**5. Assessment:** There will be  $n$  assignments and a final 3 hour exam. The final mark is calculated as follows. Let  $e$  be the mark for the exam out of 100 and  $a$  the mark for the best  $n - 1$  assignments out of 20 then the final mark out of 100 is:

$$\max \left\{ e, \frac{80}{100}e + a \right\}.$$

**6. Contact details.** You can find me in the Mathematics Building, Room 109. The phone there is 8303 4174 and my email is [mmurray@maths.adelaide.edu.au](mailto:mmurray@maths.adelaide.edu.au).

Professor Michael Murray  
2004/7/27