

## 2C1: Further Maths, Handout 0

Niels R. Walet, September 29, 2002

### The class schedule:

Lectures on Tuesday 10 am, room E8 and Thursday 9am, room G41  
Tutorial class (attendance taken!) on Mondays at 10am, H8

**Marks:** 80% from exam & 20% from coursework (two sets of homework) handed out in weeks 4 and 8; to be returned one week later.

**Web site:** <http://walet.phy.umist.ac.uk/2C1/>

### Textbooks:

There are three key books related to this course:

1. Mayer Humi and William B. Miller, "Boundary Value Problems and Partial Differential Equations" (PWS-KENT Publishing Co, Boston, 1992).  
The text mostly used to prepare the course.
2. George B. Arfken and Hans A. Weber, "Mathematical Methods for Physicists, 4th edition" (Academic Press, London, 1995). The standard text in mathematical physics. Slightly (too) advanced but an excellent reference work!
3. Michael Tinker and Robert Lambourne, "Further Mathematics for the Physical Sciences" (John Wiley&Sons, Chichester, 2000). At a slightly lower level than some of the course, but with excellent examples.

If you don't like these books, much of the material is treated elsewhere. You might want to try:

1. G. Stephenson, "Partial Differential Equations for Scientists and Engineers", 3rd Edition (Longman, London, 1985).  
Nicely compact, but lacks some detail.
2. K.A. Stroud, "Further Engineering Mathematics, 3rd edition (MacMillan, Basingstoke, 1996).  
Some students actually like it!
3. S.J. Farlow, "Partial Differential Equations for Scientists and Engineers", (J. Wiley and Sons, 1982).  
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