



22nd April 2004

**TMA401 Functional Analysis**  
**MAN670 Applied Functional Analysis**  
**4th quarter 2003/2004**

## The written examination

The written exam will be given on the **29 of May starting 8.45 pm**. A second exam will be given some time late August before the beginning of the first period for 2004/2005. If there is a need for a third written exam it will then be given some time January 2005. The top score for each written exam is 25 points (12 points for “problems” and 13 points for “theory”). To pass the exam a student needs to have at least 10 points, the bonus points from the home assignments included.

At least 7 out of 13 points on the theory of the course will come from the following theorems:

Debnath/Mikusinski (2nd ed): Th 1.6.3, 1.8.1, 3.5.2, 3.7.4, 3.9.2, 3.9.4, 3.10.1, 4.3.1, 4.3.7, 4.4.1, 4.7.1, 4.8.1, 4.8.5, 4.8.6, 4.9.3, 4.9.6, 4.9.8, 4.9.9, 4.10.1, 4.10.2, 5.2.4, 5.2.5, 5.2.6, 9.3.3, 9.5.1, 9.5.2

A note on ordinary differential equations: Theorems 1.4 and 1.7

A note on spectral theory: Method of continuity

A note on fixed point theory: Theorems 1.2 and 1.3