

# Reading list 2009–10

## 117 Advanced calculus

The current edition of the subject guide is the 2006 edition. This reading list was last updated in May 2009. Any queries about this reading list should be directed to [externalstudy@lse.ac.uk](mailto:externalstudy@lse.ac.uk).

### Essential reading

Most topics in this unit are covered in great detail by a large number of books. For that reason, we have resisted the temptation to specify essential reading in each chapter of the guide. What is true, however, is that textbook reason is essential. Textbooks will provide more in-depth explanations than you will find in the subject guide (which is explicitly not meant to be a textbook), and they will also provide many more examples to study, and many more exercises to work through.

### Recommended reading

The following books are the ones we have referred to in the subject guide (**listed roughly in order of usefulness**).

- Ostaszewski, A. *Advanced Mathematical Methods*. (Cambridge: Cambridge University Press, 1991) [ISBN 9780521289641].
- Binmore, K. and Davies, J. *Calculus: Concepts and Methods*. (Cambridge: Cambridge University Press, 2002) [ISBN 9780521775410].
- Ostaszewski, A. *Mathematics in Economics: Models and Methods*. (Cambridge: Cambridge University Press, 1993) [ISBN 9780631180562]. Available from [www.blackwellpublishing.com](http://www.blackwellpublishing.com).
- Anthony, M. and N. Biggs *Mathematics for Economics and Finance: Methods and Modelling*. (Cambridge: Cambridge University Press, 1996) [ISBN 9780521559133]. This book is useful for revision of some basic topics.
- Spiegel, M.R. *Laplace Transforms*. Schaum Outlines Series. (McGraw-Hill, 1965) [ISBN 9780070602311].
- Spiegel, M.R. and R.C. Wrede *Advanced Calculus*. Schaum Outlines Series (McGraw-Hill, 2002) second edition [ISBN 9780071375672].
- Whittaker and Watson *A course of modern analysis*. (Cambridge: Cambridge University Press, 1984) fourth edition [ISBN 9780521588072].
- Bender, C.M. and S.A. Orszag *Advanced Mathematical Methods for Scientists and Engineers, Asymptotic Methods and Perturbation Theory*. (Springer Verlag, 1999) [ISBN 9780387989310].