

## Handouts and Overheads

There is a handout for each topic which contains aims, references and tutorial questions. All course handouts are available via the WEB. In addition a copy of all handouts is available in the fourth/fifth year workroom.

The short booklet *The Fourier Transform, (What you need to know)* will be supplied. This booklet contains, mainly, revision material on the Fourier Transform which is *essential* to the understanding of this course.

## Tutorial Questions

There are a range of tutorial questions for each section. Some tutorial questions are graded with symbols that denote difficulties etc.



This questions requires material not covered in lectures so you will have to resort to books. Unless stated these questions are examinable.



This questions contains complicated or messy mathematical manipulation.



Difficult questions, not needed for this course but does often contain useful illustrations and results. These are the *challenge questions*.

Some questions will have more than one warning symbol.

Full solutions are available in the Fourth Year Workroom, and via the WEB. Many of the solutions are very detailed and contains extra or background information which is again printed in *italic*.

## Simulation and Demonstration Software

There is, an increasing, set of computer demonstrations on the CP Laboratory machines associated with this course. These are detailed in the tutorial problem sheets.

## Course Web Pages

There is a course *Web* page which linked via the Departmental “on-line” course information. This page contains links to all course handouts, overheads, tutorial solutions and many other useful links to on-line optics resources.

## Tutorials

There are no formal small group tutorials associated with this course but fortnightly problem classes will be arranged during Autumn term, and revision classes during Summer term. Check the tutorial room booking sheet on the Final Year Notice board for details of times.

## Books

- Goodman, *Introduction to Fourier Optics* Second Edition, Mc-Graw-Hill 1996 £22.95. New edition of a classic book on Fourier Optics, now at sensible price. Course book for about 80% of material. (4 JML Reserve).
- Guenther, R. *Modern Optics* Wiley, £19.50 Good book at right level, good for examples but material presented in very strange order. Contains many hundreds of typographical mistakes! (3 JLM Reserve).
- Hecht *Optics* Addison-Wesley The final chapters only. Useful if you have a copy from Physics 3. Excellent examples and diagrams but does not go far enough for this course.
- Born & Wolf *Principles of Optics* Ed. 7, Cambridge 1999. *The* classic optics reference text at an advanced level containing far more than is required for this course. Now back in print, but not for the faint hearted! (1R JML).
- Range of specialist books are given in the lecture references. All are in JML.