semester ONE 200405 XE100.xls

|  | SEM1 | XE100 Mathematics for Engineers |  |
| :---: | :---: | :---: | :---: |
| No. | No. Tuesday | Material identified during lecture slot | Action plan, with Bold italics to indicate what was not done? |
| 0 | $128-\mathrm{Sep}$ |  |  |
| 1 | 2 05-Oct | Complex numbers; geometrical representation and arithmentic rules | This is all a bit confusing... must buy the suggested text book and go through some examples |
| 2 | 3 12-Oct | Complex numbers; a+jb representation; polar; arithmetic | Ah, it all seems to make more sense in $a+j b$ form... must practise polar representation |
| 3 | 4 19-Oct | Vectors; free and fixed; arithmetical rules | Done (3d) vectors before - easy |
| 4 | 5 26-Oct | Dot \& Cross products; applications | Must revise dot product (leant at a-level). Must learn Cross Product and methods |
| 5 | 6 02-Nov | Elementary functions; Taylor series | Missed the beginning of this lecture due to bad traffic - must read up on it later |
| 6 | 7 09-Nov | Elementary differentiation; geometric interpretation; rate of change | Done this at a-level - easy |
| 7 | 8 16-Nov | Basic rules of differentiation | As Above |
| 8 | $9{ }^{23-N o v}$ | Integration; definite and indefinite; connection | As Above |
| 9 | 10 30-Nov | Integration; rules; partial fractions | Must revise these rules! Making more sense this time round than at a-level though |
| 10 | 11 07-Dec | Numerical differentiation introduction; applications | Pretty straight forward, formulae will be provided for the exam |
|  | 14-Dec | Numerical differentiation; Simpson's rule |  |
|  |  |  |  |
|  | 21-Dec | Holidays |  |
|  | 28-Dec | Holidays |  |
| 11 | 12 04-Jan | Revision | Revision |
| 12 | 13 11-Jan | Revision | Revision |
| 13 | 14 18-Jan | Revision | No lessons scheduled this week |
| 14 | 15 25-Jan | Examinations | Examinations |
| 15 | $1601-\mathrm{Feb}$ | Examinations | Examinations |
| 16 | $1708-\mathrm{Feb}$ |  |  |

