

ELEC. Eng. 2CJ4.

Tim Davidson

ITB A-310

Ext: 27352

Email: davidson@mcmaster.ca

Include EE2CJ4 in subject

Website:

www.ece.mcmaster.ca/~davidson/EE2CJ4

Marking scheme

Tutorial participation = 5%.

Two midterms @ 17.5 = 35%.

Final exam = 60%.

IMPORTANT REMINDERS

- 2CJ4 is a prerequisite for many 3rd year courses.
- We reserve the right to conduct make-up tests/exams orally
- Unapproved absences will receive a mark of zero

- EE2CJ4 is an extension of EE2CIS
- It is expected that you are fluent in the material studied there.
- Good news: Many of you appear to be fluent:

Grade distributions for EE2CIS

A:	29.8%
B:	21.3%
C:	20.7%
D:	6.4%
F:	14.9%
DNW:	6.9%

Assumed Knowledge

- Dissipative sign convention
- Ohm's Law; Kirchoff's Laws
- Node and Mesh Analysis
- Superposition, Thevenin & Norton equivalents
- Capacitance & Inductance
- Transient analysis of first & second order circuits
- AC steady state analysis (Phasor techniques)
- Steady-state power analysis

Brief course outline

- Review
- Operational Amplifiers (ch 4)
- Frequency response (ch 12)
- Laplace transform circuit analysis (Chs 13 & 14)
- Two-port networks (ch 16)
- Magnetic circuits
- Magnetically coupled networks (ch 10)
- Three phase circuits (ch 11)

Course style

- Greater emphasis on problem solving
- In particular
 - you should not expect test/exam problems to look like those in the book.
 - they will test the same concept, but will be selected to look different
- We will develop structured tools for analyzing such problems
- Previous examples: Node and mesh analysis