Mastery Test Part 3 Results

Review Session for
"Electronics and Telecommunications"
A Fairfield University E-Course
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Module: Semiconductor Electronics
(in two parts)

- Text: “Electronics,” Harry Kybett, Wiley, 1986, ISBN 0-471-00916-4
- References:
  - Electronics Tutorial (Thanks to Alex Pounds)
  - Electronics Tutorial (Thanks to Mark Sokos)
- 5 - Semiconductors, Diodes and Bipolar Transistors
  - 5 on-line sessions plus one lab
- 6 - FETs, SCRs, Other Devices and Amplifiers
  - 5 on-line sessions plus one lab
- Mastery Test part 3 follows this Module

Topics

- Semiconductors and Doping
- Diodes and Applications
- Bipolar Transistors
- Transistor Amplifiers

Part 5

- Field Effect Transistors
- Transistors as a switch
- Other Devices
- Class A, B, and C amplifiers
- Operational Amplifiers

Part 6

Section 5 Schedule:

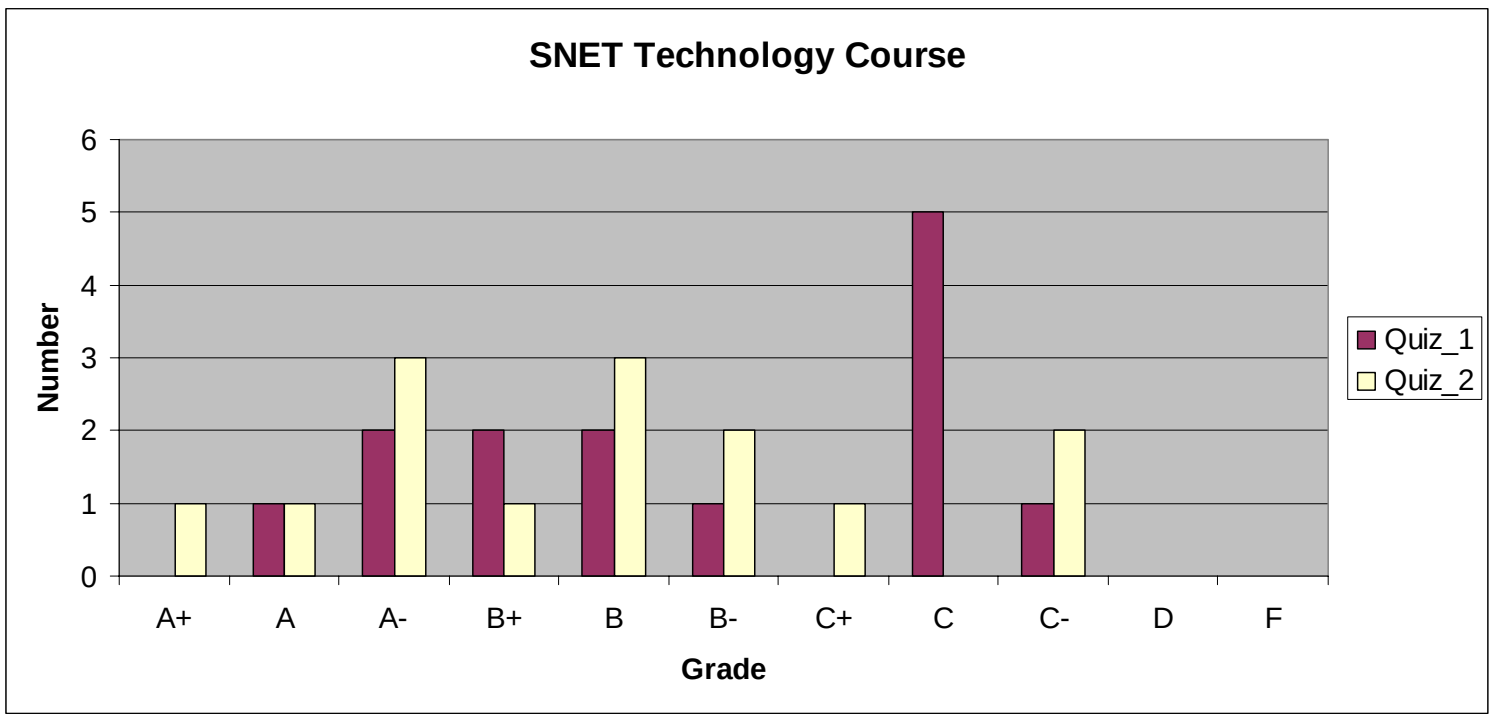
Session 5a – 09/18	Semiconductors and Doping	Elect 1-7 1.23 – 1.39
MT2 Results – 09/23	We'll discuss MT2	
Session 5b – 09/25	Diodes	Kybett Chapter 2
Session 5c – 09/30	Diode Applications	Kybett Chapter 11
Session 5d – 10/02 (lab - 10/05, Sat.)	Bipolar Transistors	Kybett pp 51 - 70
Session 5e – 10/07 (Quiz 4 due 10/12)	Transistor Amplifiers	Kybett pp 173 – 201
Session 5f – 10/16 (Oct 14 is a holiday)	Review (Discuss Quiz 4)	
Session 5g - 11/13 (SNET Reorganization)	Zener Design Exercise	Email Hand-Out
Session 5h 01/06	(Review and Intro to Part 6	

Section 6 Schedule:

Session 6a	01/15	Field Effect Transistors	Kybett pp 70 – 77, pp 201-209
Session 6b	01/20	Transistors as a switch	Kybett pp 78 –107
Session 6c	01/22	SCR's, Triacs and UJTs	Notes
Session 6d	01/27	Class A, B, and C Amplifiers	Notes
Session 6e (no class Monday)	01/29	Q & A	
Session 6f (Lab - 02/08, Sat.)	02/05	Operational Amplifiers	Kybett pp 209-215
Session 6g (Quiz 6 due 02/23)	02/10	Review for Quiz 6 (no class 2/17 or 2/19)	
Session 6h	02/24	Discuss Quiz 6	
Session 6i	02/26	Review for MT3	
MT3	03/01	MT3 Exam	
Session 6j	**03/03**	**Discuss MT3**	

Quiz Results to Date

- The class had a B- and B average – Nice Job.
- Most of you should find the Mastery Test Part 1 easy.
- 2 or 3 of you need to correct minor deficiencies.

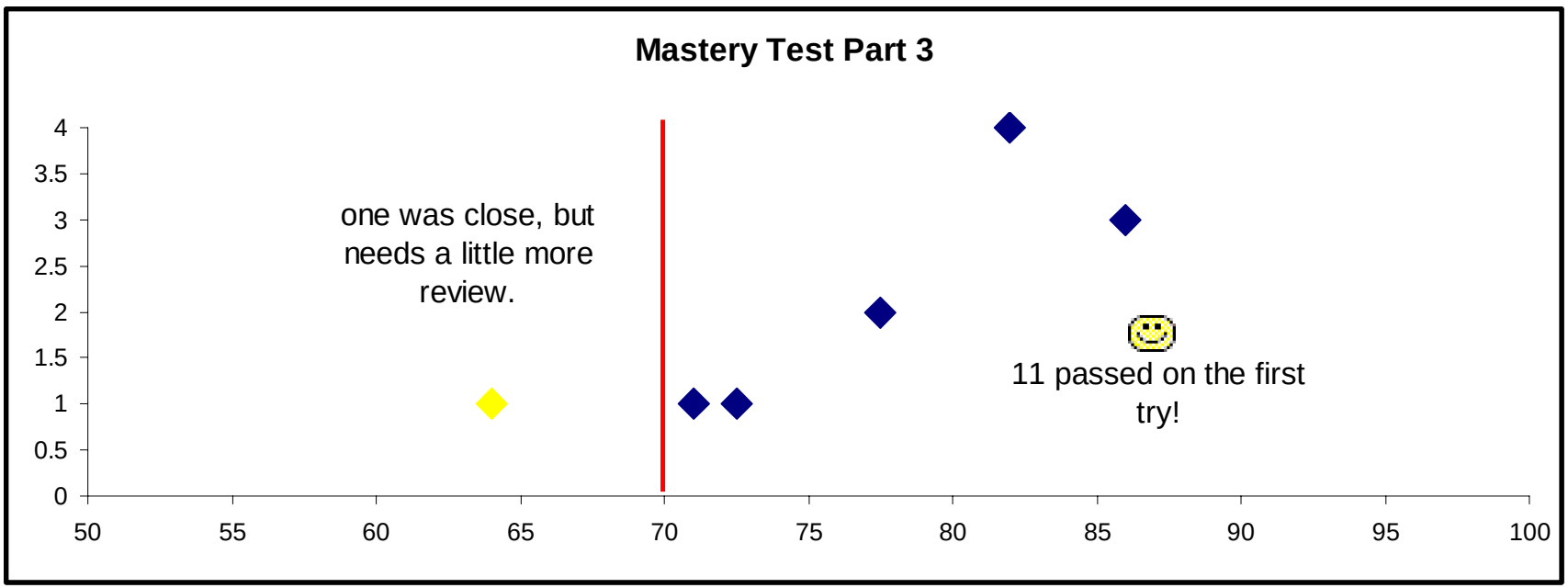


Mastery Test: Part 3

- Saturday, 1 March 2003 – Cheshire
  - 12 students (2 missing)
  - 9 am
- 50 multiple choice questions – 2 points each

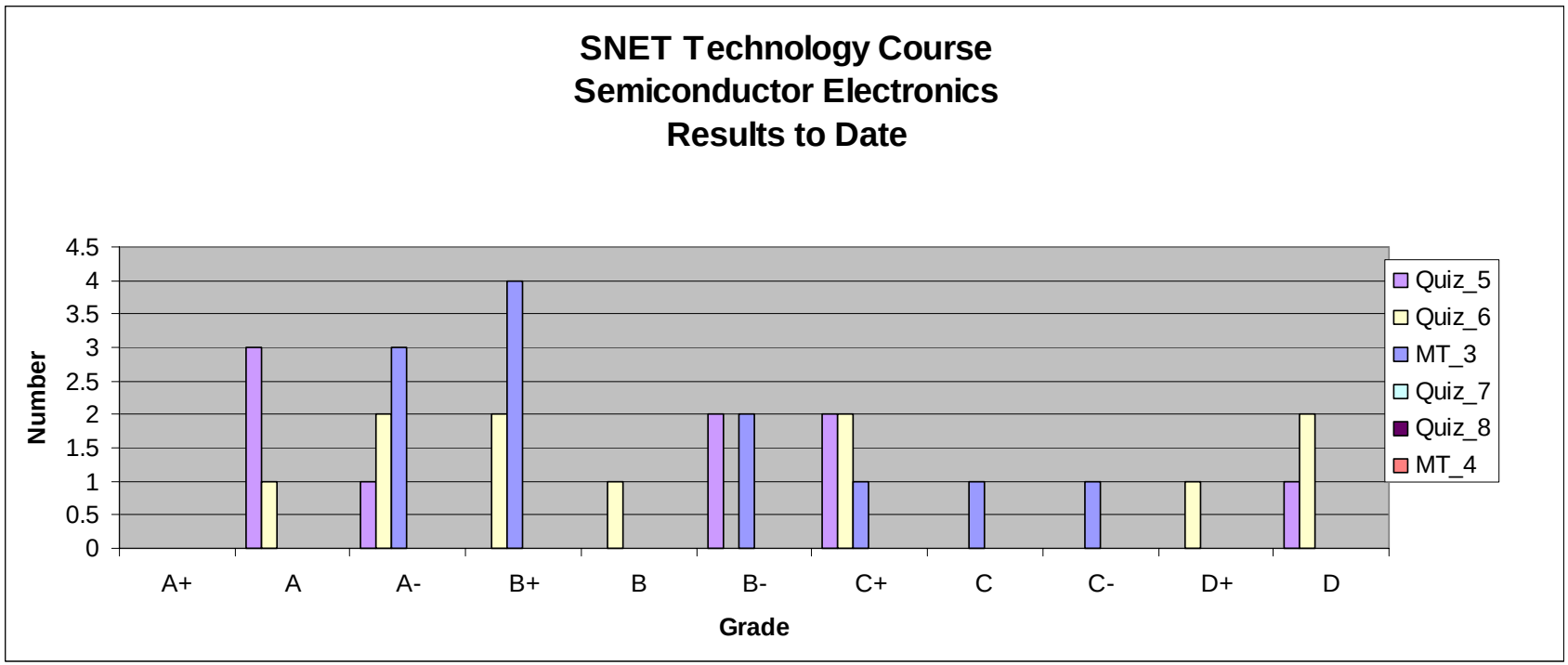
MT3 Results

- 11 out of 12 made it on the first try
  - One just made it; One just missed
  - I'm really proud of your efforts to date



Results to Date

- Here is the distribution of Quiz and MT3 grades for “Semiconductor Electronics”



Mastery Test Part 3

- Let’s go to the exam itself via AppShare and discuss the answers
- This part of the session will not be available for recorded review

Section 7: Digital Electronics 1

- Logic gates and Boolean algebra
- Truth Tables
- Binary numbers
- Memory
- Flip-Flops

Section 7 Preliminary Schedule

Session 7a	03/05	Introduction: Binary, Logic Gates and Boolean	
Session 7b	03/10	Logic Gates and Truth Tables	
Session 7c	03/12	Binary numbers	
Session 7d	03/17	Memory: Registers, RAM & ROM	
Session 7e (Lab - 03/22, Sat.)	03/19	Pulses, Clocks and Flip-Flops	
Session 7f (Quiz 7 due 03/30)	03/24	Review for Quiz 7	
Session 7g	03/31	Quiz Results	

Section 8: Digital Electronics 2

- Clocks and Counters
- Shift Registers
- Decoders
- Multiplexers & Demultiplexers
- Sampling

- **MT4**