MTRX 2700 – Mechatronics 2
2013

Eduardo Nebot
Administraion

• 3 Hours of Lectures per week:
  – 10-12 am Tuesday in *Civil Engineering Lecture Room 3*
  – 10 am Thursday in *Aero Lecture Theatre 311*

• Lab in Mechatronics Lab (Link Building Level 3)
  – 3 hours/week on Tuesday (2 –5pm) or Wednesday (2 – 5pm). This is pre-allocated and non-negotiable.

• Lab work set each week – 60% of final course mark
Lab Induction

• The induction will take place in Week 1 (THIS WEEK)

• The induction will take around 1 hour at your regularly scheduled lab time.

• This includes account activation and laboratory safety induction.
Academic Staff

Lecturer:
  – Prof Eduardo Nebot
  – nebot@acfr.usyd.edu.au
  – ACFR

Tutors:
  – Chris Brunner/ Andrew Palmer (Tuesday)
  – Bryan Clarke/ Eduardo  (Wednesday)
  – {a.palmer; c.brunner;b.clarke}@acfr.usyd.edu.au
Course Web-Site

• This course will use the web pages set in aeromech

• Resources
  – Lecture Slides
  – Datasheets / Reference Material
Contacting Us

• Two-Stage Contact System:
  1. Ask either Myself or a Tutor by E-mail
     • Use Subject: MTRX 2700 or your mail may get lost
  2. If your problem can’t be solved by e-mail, set up a meeting

Best Approach

Talk to us during Labs and Lectures!
The prescribed textbooks are:

• Spasov, P. *Microcontroller technology: the 68HC11 & 68HC12*.

• *MTRX 2700 Mechatronics 2 Course Notes*

The laboratory notes refer to the textbook. You will find the labs much more difficult if you do not have the textbook.

• Second-Hand is fine
Notes

• The *MTRX2700 Course Notes* are available at the University Printing Service located under the sports centre.

• The **Notes and Textbook are Mandatory**

• The labs will be impossible without both these references
Course Objectives

By the end of Semester, students should

• Gain an intimate understanding of the way in which microcontrollers operate
• Understand the relationship between the software and hardware used in a Mechatronic system
• Learn concepts useful in the design and implementation of simple Mechatronic systems
• Apply their knowledge to implement a simple Mechatronic system given a design specification
Assessment

• Lab assessments (60%)
  – Short Lab Assignments (30%)
  – Major Assignment (30%)
• Exam (Need to pass the exam) (40%)

• If you have applied what you have learnt during the lectures to the labs, the exam will be simple!

• The emphasis is on learning and understanding, not memorisation
My Expectations

By undertaking this subject, the student is committing to:

• Learn the subject, not just memorize notes;
• Attend all lectures, with the aim of learning and understanding, not just note taking;
• Attend all laboratory sessions, with the aim of maximizing your understanding of the course material;
• Study this topic for at least 3 hours per week outside of allocated class time;
• Being familiar with, and adhering to the University’s policies, in particular the policy on academic honesty.
What You Can Expect

- We are willing to help anybody that has attempted to first help themselves
- We do not give out answers, I help you to understand the problem
- You are free to ask questions *at any time* here in the lectures, in the labs, or via email
- Let me know immediately if things are not going well (including issues with group dynamics) and we will attempt to resolve any issue.