Lab Rules

- Don’t jam the door open
- Don’t remove lab equipment
- No hoarding
- Don’t change equipment connections w/o TA approval
- Bad lab etiquette will lead to a loss of points
- Learning to use new equipment: do not flail randomly
- Report broken equipment (Within one business day)
- Do not hide breakage, it will result in an F
- You get to burn out two PICs or equivalent.
Ethics

ECE 445, Senior Design
Ethics and morals

- Individual and collective standards
  - I feel morally bound to volunteer in my community
  - I am ethically bound to properly credit others

- Ethics is group and context dependent
  - An MD has an ethical obligation to provide care in an emergency
  - An engineer has an ethical obligation to acknowledge and correct errors in technical analysis
The power of ethics

- Provides an external reference in ambiguous or confusing situations
- Provides a measure of protection for employees who take a stand
- Fosters a healthy, productive working environment
We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

1. to accept responsibility in making decisions consistent with the safety, health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;

2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;

3. to be honest and realistic in stating claims or estimates based on available data;

4. to reject bribery in all its forms;

5. to improve the understanding of technology, its appropriate application, and potential consequences;

6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;

7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;

8. to treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;

9. to avoid injuring others, their property, reputation, or employment by false or malicious action;

10. to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

Approved by the IEEE Board of Directors
February 2006
The dangers of group-think

• Ethics codes are not a replacement for human judgment

• Ethics is not a static subject
  • Changing standards of acceptable risk
  • New boundaries of possibility

• Trivialization
A good notebook
(Speaking of good practice)

• Protects your IP
• Provides a historical document
• Provides a means to support your claims and reproduce results
• May be an ethical obligation to your employer
Credit where credit is due

• Always cite directly quoted material.
• Be aware of copyright issues.
• Good scholarship requires citation of related work and precedents.
• Problems are harder to come by than solutions.
The line between quoting and stealing

- Fair use
- Setting someone else’s work in context
- Do not use someone else’s material as a substitute for your own work.
Honesty

• Beware the line between promoting your work and distorting the facts
• There is a difference between rejecting bad data and committing lies of omission
• Don’t fake data! (The cautionary tale of Jan Hendrick Schoen)
Final thoughts

• Would I be comfortable having my name widely attached to this project?

• Do I want to live in a society where this product is available or widely used?

• Would I be proud of a career dominated by the decision making demonstrated here?

• The Golden Rule.

• The real test of your ethical standards will come when you can significantly benefit from unethical behavior and are confident you will not be caught.