

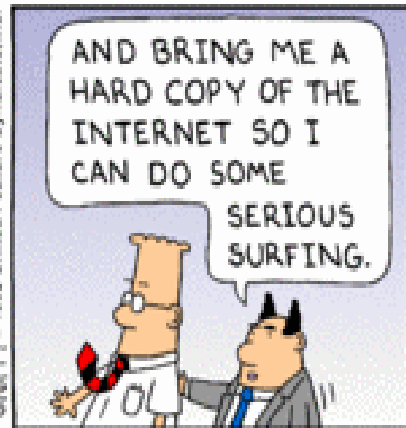
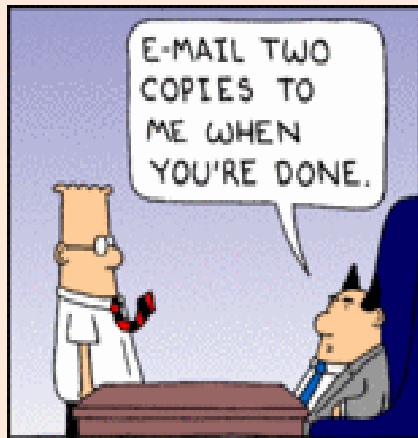
ENCS 521

Computer Engineering Ethics

Workplace Responsibilities and
Rights

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the workplace...



Professionalism at the workplace...

- Professionalism at work involves competence, a sense of fun and excitement, good conduct, and personal commitments
- **Engineer's main responsibility: Top performance and professionalism**
- What are the key issues at work?
- Some things matter, some do not? Which ones? Many different perspectives...
- Example: Dress code?
- Example: Office space/decor "code"?

Ethical corporate climate

- Ethical values in full complexity are acknowledged
- Responsibilities to constituencies affirmed (other teams, departments, administration, clients/customers)
- Ethical language is acceptable (you can say what you think is right and wrong)
- Management sets moral tone in words, policies, and personal examples, and each person does too.



Loyalty


- When you accept a job offer, what do you owe the company?
- **Agency-loyalty:** As an employee, fulfill contractual duties to employer (get the job done to your best abilities)
- What about corporate loyalty to employees? How easily can you get fired if you are performing well? Does this imply that your loyalty should degrade?
- **Attitude-loyalty**
 - Willingly seek to perform duties
 - Enthusiastic, not “forced”
 - Over long time periods good attitude can be difficult to maintain
- Codes of Ethics: Engineers ought to be loyal (faithful agents) to employers... Agency-loyalty or Attitude-loyalty?

Collegiality


- NSPE Code of Ethics: “Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice or employment of other engineers. Engineers who believe others are guilty of unethical or illegal practice shall present such information to the proper authority for action.”
- Collegiality entails:
 - Respect for colleagues, valuing their expertise and devotion to social good...
 - Shared commitment to moral ideals...
 - Connectedness, mutual support.







Managers and Engineers

- Respect executive authority, but...
- Your demands for professionalism, and appropriate professional tone set by the boss and in the workplace, are important! 
- Expert authority is important, a key aspect of professionalism, and something that should be respected (even if someone is not your boss)





Conflicts

- Conflicts over schedules... 
- Conflicts over priorities...
- Conflicts over assignment of personnel resources...
- Conflicts over technical solutions...
- Conflicts over administrative procedures...
- Personality conflicts...


Conflict Resolution

- Separate the people from the problem.. 
- Focus on Interests, not positions... 
- Generate a variety of possibilities before 
deciding what to do.
- Insist that the result be based on some 
objective standard.


Confidentiality

- What to keep secret?
- “Proprietary information” - disclosure to competitors would hurt the company. The company has a right to some secrets. 
- What about a right to secrecy about poor practice, unethical policies and practices, etc.? 
- Changing jobs: – Confidentiality to old employer does not cease! 
 - But, there is a *soft boundary as you always bring along your expertise and experiences (i.e., your brain)!* 


Management policies

- Mark documents as “proprietary”?!
- Make clear statements about what is and is not confidential.
- “Employment contracts” 
 - Have you signed one?
 - Did you read the fine print?
- Clear policies are critical! They help set a professional tone since they set clear boundaries. *Everyone then knows what is right or wrong.*



Conflicts of Interest

- Situations that if pursued could keep employees from meeting obligations to employer: 
 - Gifts, bribes, kickbacks?
 - Interests in other companies (suppliers?)
 - Insider information (impact on stocks)

Rights of Engineers

- Professional rights:
 - Right of professional conscience (moral autonomy)
 - Right of conscientious refusal (can refuse to be unethical just because you view it to be that way)
 - Right to recognition, fair pay
- Employee rights:
 - Privacy (e.g., in computers). To what extent can the company pry?
 - Equal opportunity, nondiscrimination... 
 - No sexual harassment...


Whistle-Blowing

- What is whistle-blowing? 
 - Disclosure by employee outside approved channels, to group that may take action
 - Topic is a significant moral problem (e.g. public safety, cheating)
- *Example: Ernest Fitzgerald and the C-5A (Public employee who blew the whistle to congress...)* 
- *Example: Dan Applegate and the DC-10 (Private employee who notified management, but never blew the whistle...)*

Internal Whistle-Blowing




Dan Applegate and the DC-10

- June 12, 1972, American Airlines Flight 96, a McDonnell Douglas DC-10, lost its cargo door while flying over Windsor, Ontario. But landed safely. 
- The "Applegate memorandum" was written shortly after the Flight 96 incident, on 27 June, and delivered to Applegate's immediate supervisor.
- potential design faults in the door that could cause the aircraft's cargo doors to open mid-flight, which could lead to loss of control.
- Applegate suggested major improvements to the door and the control of the airplane.
- Management approved minor changes, only to the door...
- Applegate never blew the whistle...


Turkish Airlines Flight 981

- Crashed on the outskirts of Paris killing all 346 people on board, in 1974.
- the crash was due to the same technical fault Applegate had foreseen two years prior.
- The changes after Flight 96 had not been made to this aircraft, in spite of the service logs indicating that they had...

Moral guidelines for Whistle-Blowing

- “Permissible and obligatory” if: 
 - Actual or potential harm is serious
 - Harm is documented
 - Concerns have been reported to superiors
 - Do not get satisfaction, explore all other organizational channels to the top
 - Reasonable hope that whistle-blowing will help prevent or remedy the harm
- Example: Challenger case

Commonsense procedures...

- Except in rare emergency, work through channels 
- Know the rules for making appeals
- Be prompt in objecting
- Be tactful, low-key, avoid getting emotional (stay professional, focus on objective issues)
- Be considerate of feelings, avoid personal criticisms