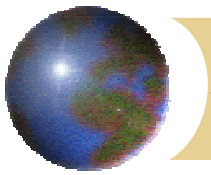


*Incorporating Awareness of
Professional Ethics into
Science Courses*

Amy E. Jetton

Middle Tennessee State University

Murfreesboro, TN



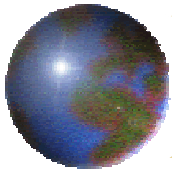
What Is Ethics?



“Ethics refers to standards of conduct . . . that indicate how one should behave based on . . . principles of right and wrong. As a practical matter, ethics is about how we meet the challenge of doing the right thing . . . ”

Making Ethical Decisions, Josephson Institute of Ethics

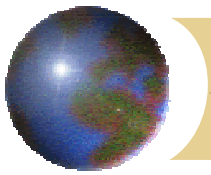
<http://www.josephsoninstitute.org>



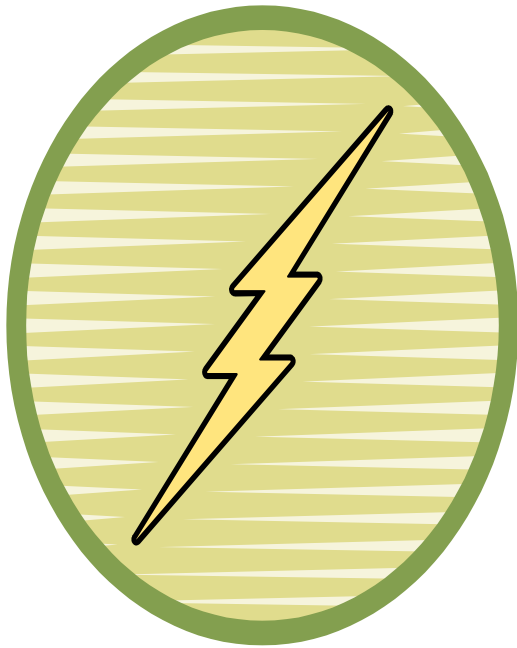
What is Professional Ethics?



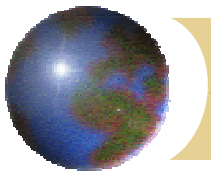
A standard or code of conduct which members of a profession expect of other members



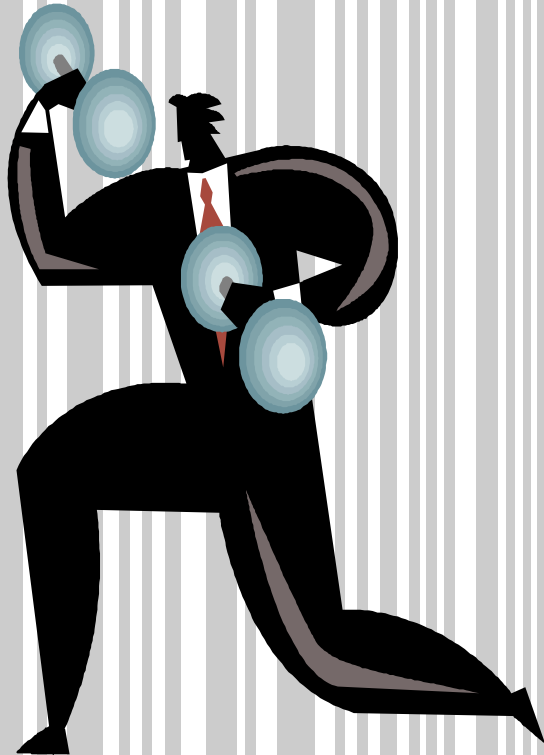
General Interest in Requiring Teaching of Ethics



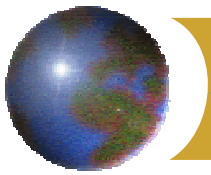
- Challenger explosion
- Cold fusion
- Baltimore Case
- Gallo Case
- Investigations of professional misconduct common in journals and newspapers



Examples of Professional Codes



- ⊕ Accreditation Board for Engineering & Technology
- ⊕ National Society of Professional Engineers
- ⊕ American Mathematical Society
- ⊕ National Education Association
- ⊕ American Association for the Advancement of Science

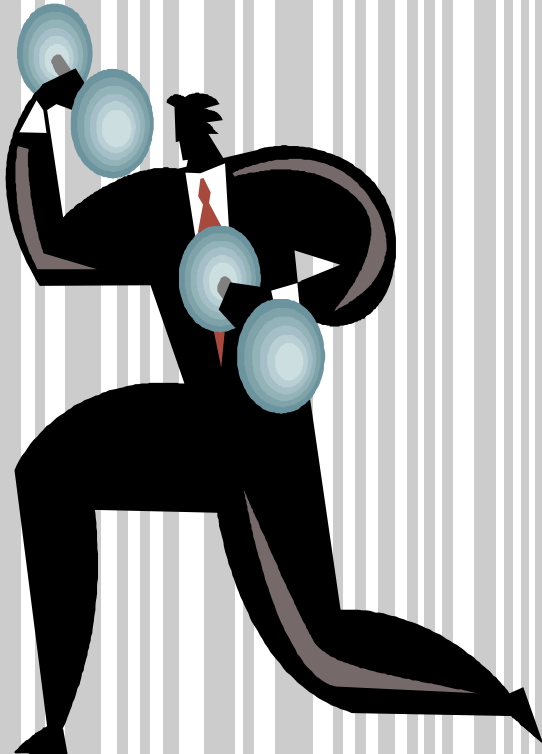


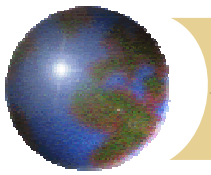
Examples of Professional Codes

- Over 850 explicit codes available online at

[http://www.iit.edu/departments/csep/
PublicWWW/codes/codes.html](http://www.iit.edu/departments/csep/PublicWWW/codes/codes.html)

- Some codes are less explicit such as responsible conduct of research training, required for NIH & NSF trainees.

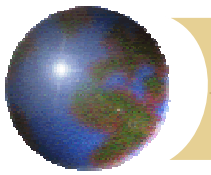




Awareness of Professional Codes



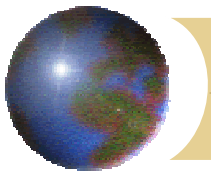
- When students enter the professional world, they will be expected to follow an explicit or implicit ethical code.
- Do we teach students that codes exist?
- Do we teach students how to deal with ethical dilemmas in their professional lives?



My Experiences

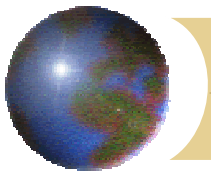


- Became interested in scientific ethics after a seminar last spring
- Attended a summer workshop on incorporating teaching of ethics into science classes
- Center for the Study of Ethics in the Professions, IIT

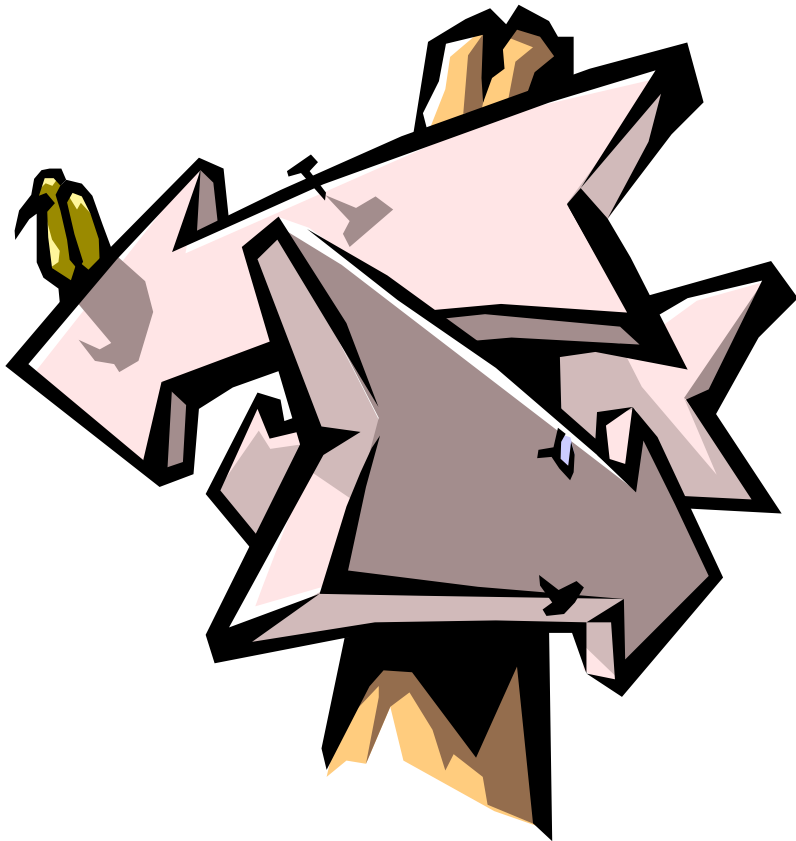


How I've Incorporated Ethics

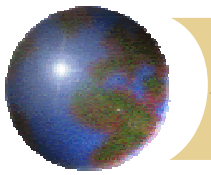
- Lecture (*Codes & Guide*)
 - PowerPoint Presentation
 - Exam Questions
- Case Study #1 Authorship (*No Real Dilemma*)
 - Group Discussion
 - Worksheets (*following Guide*)
- Case Study #2 Authorship (*True Dilemma*)
 - Discussion Boards on Web
 - Required Postings & Paper



Guide to Ethical Decision Making



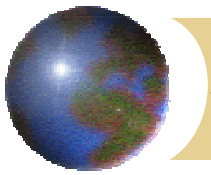
- 1. State problem.*
- 2. Check facts.*
- 3. Identify relevant factors.*
- 4. Develop list of options.*
- 5. Test options.*
- 6. Make a choice.*
- 7. Review the first 6 steps.*



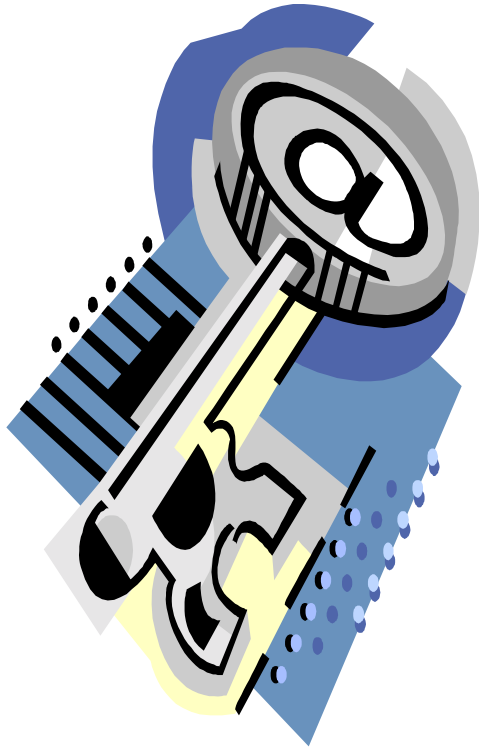
What You Can Do In Your Class



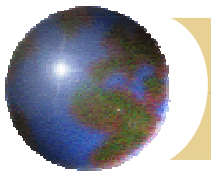
- Awareness of standards or codes within your discipline (*lecture or students look up*)
- Use codes to illustrate necessity of your course content
- Historic cases, videos & discussions
- Case studies & role playing



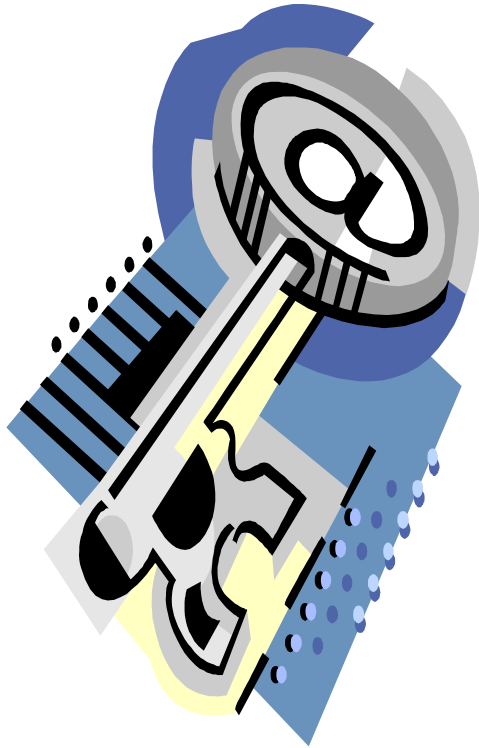
Resources for Studying or Teaching Professional Ethics



- Center for the Study of Ethics in the Professions, Illinois Institute of Technology
- Institute for the Study of Applied & Professional Ethics, Dartmouth College
- Institute for Global Ethics
- Josephson Institute of Ethics



Resources for Studying or Teaching Professional Ethics



- AAAS – Code & Video Project
- NIH
- NSF
- Most professional societies
- Association for Practical & Professional Ethics