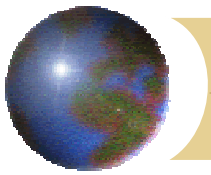


*Incorporating Awareness of  
Professional Ethics into  
Science Courses*

Amy E. Jetton

Middle Tennessee State University

Murfreesboro, TN



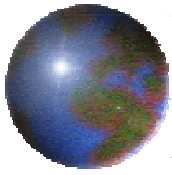
## *What Is Ethics?*



“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*

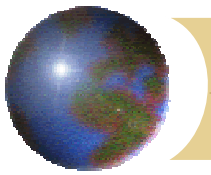
<http://www.josephsoninstitute.org>



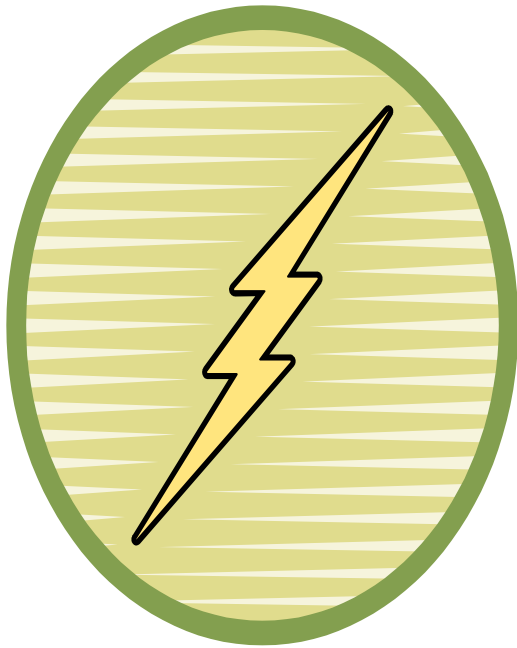
# *What is Professional Ethics?*



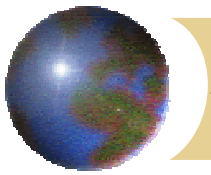
A standard or code of conduct which members of a profession expect of other members



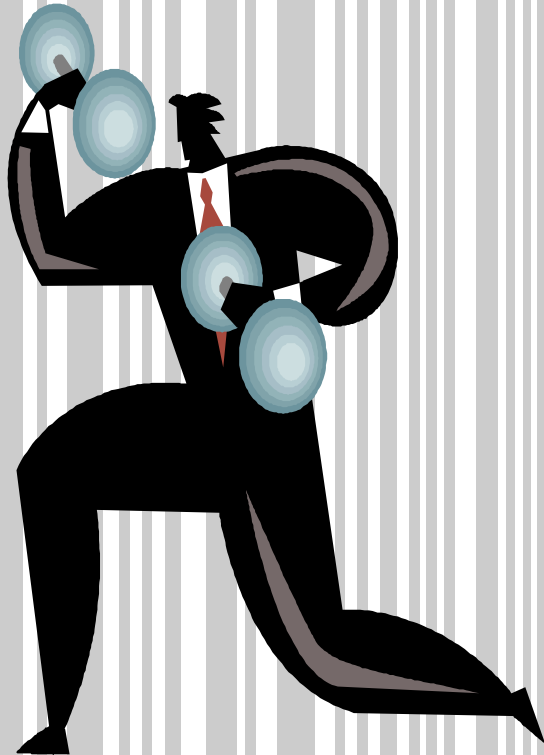
# *General Interest in Requiring Teaching of Ethics*



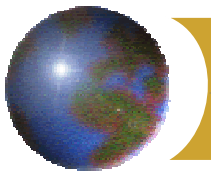
- Challenger explosion
- Cold fusion
- Baltimore Case
- Gallo Case
- Investigations of professional misconduct common in journals and newspapers



# *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



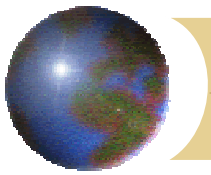
# *Examples of Professional Codes*

- 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.

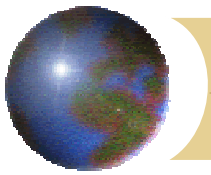




# *Awareness of Professional Codes*



- 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?

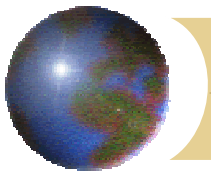


## *My Experiences*



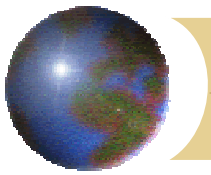
- Became interested in scientific ethics after a seminar last spring
- Attended a summer workshop on incorporating teaching of ethics into science classes
- Center for the Study of Ethics in the Professions, IIT



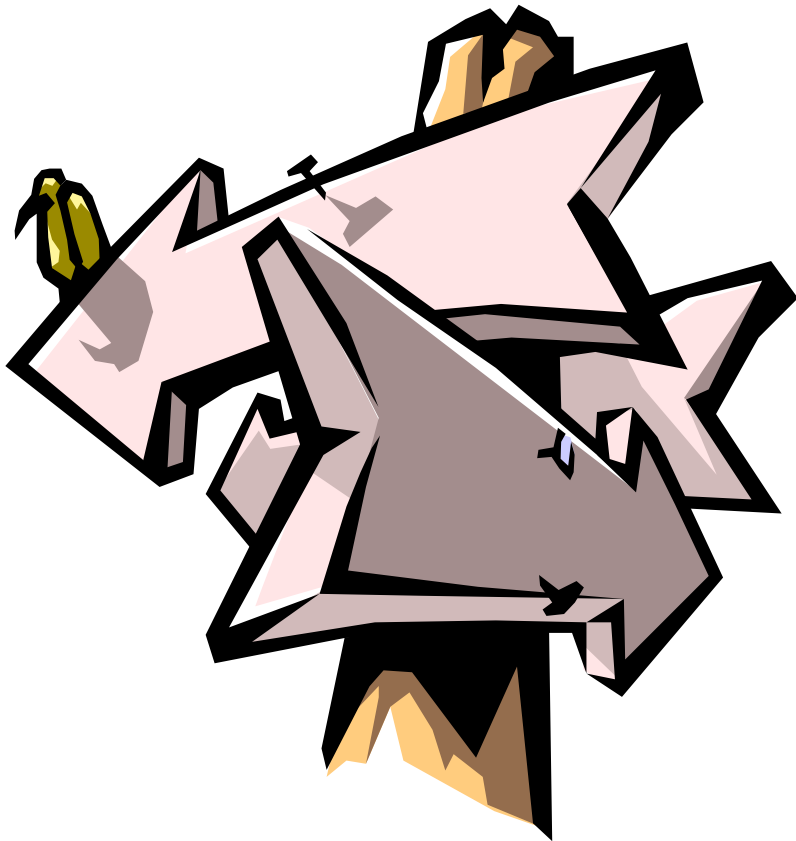


# *How I've Incorporated Ethics*

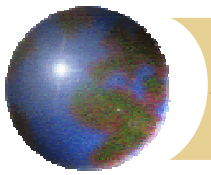
- Lecture (*Codes & Guide*)
  - PowerPoint Presentation
  - Exam Questions
- Case Study #1 Authorship (*No Real Dilemma*)
  - Group Discussion
  - Worksheets (*following Guide*)
- Case Study #2 Authorship (*True Dilemma*)
  - Discussion Boards on Web
  - Required Postings & Paper



# *Guide to Ethical Decision Making*



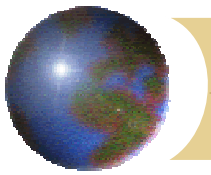
- 1. State problem.*
- 2. Check facts.*
- 3. Identify relevant factors.*
- 4. Develop list of options.*
- 5. Test options.*
- 6. Make a choice.*
- 7. Review the first 6 steps.*



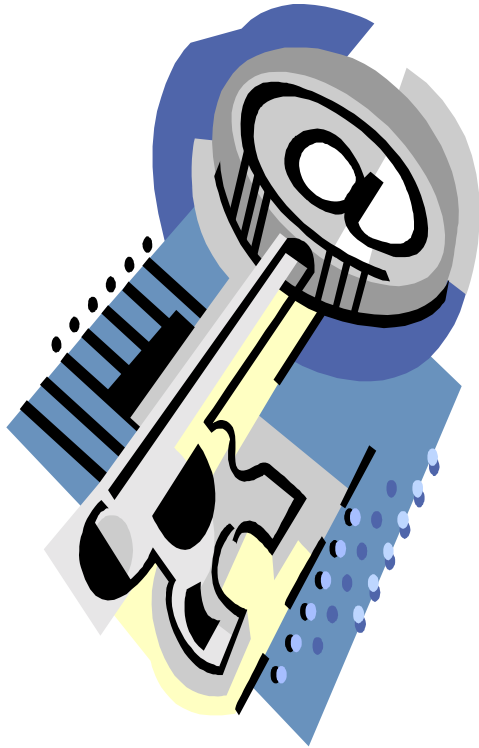
# *What You Can Do In Your Class*



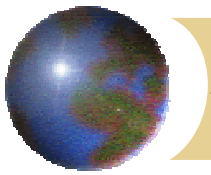
- Awareness of standards or codes within your discipline (*lecture or students look up*)
- Use codes to illustrate necessity of your course content
- Historic cases, videos & discussions
- Case studies & role playing



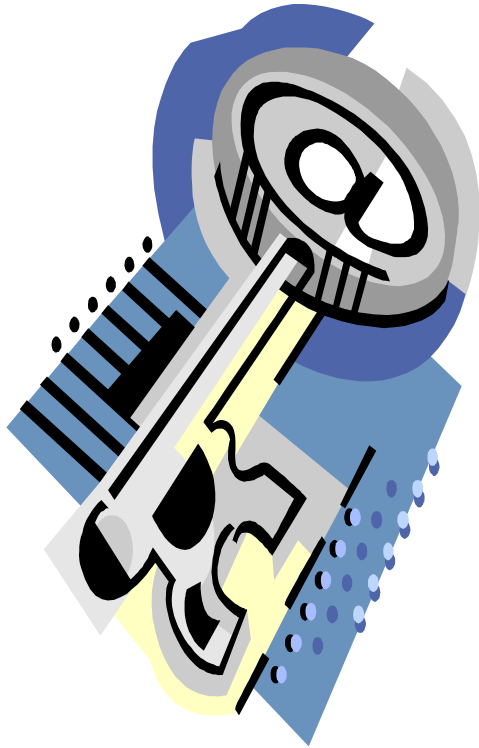
# *Resources for Studying or Teaching Professional Ethics*



- 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