

Lower level undergraduate course (ME346):

Specific Plan

→ One-half of one 75 minute class period devoted to ethics module – continue to incorporate into brief examples throughout semester

- Give students a general engineering B/W example (Case Study 1) about an engineer in materials selection. Discuss briefly in class.
- Present a grey example (Case Study 2); let them think about it briefly, then present Ethics Lecture.
- After lecture, present the grey example again. Ask students to form small groups. Distribute the Reasoning Table to help direct and organize teams toward ethical reasoning principles. Give groups five minutes to work together on filling in the sheet. Tell groups that one person should be designated as the spokesperson for the group.
- At end of five minutes, ask for a spokesperson of a group to identify the ethical issues, players, etc. – basically ask them to discuss how the sheet is filled in. Allow it to turn into a discussion. Direct discussion of spokespersons along ethics reasoning lines.
- Assign a self-selected team homework problem with two cases, the Case Study 2 and another problem having to do with a class situation. Have students use the Reasoning Table to analyze the issues. Use the Ethical Analysis Rubric to grade. Do not give the Ethical Analysis Rubric out to the students. The second problem should include a situation of one of students working in group homework where one student does not participate – sets stage for later team homework activities. This is always a problem in the class that could be addressed up front in this manner. Discuss the team analysis on the day that it is handed in.
- As the semester progresses, look for ways to incorporate these principles into application of basic concepts. Keep a copy of the Reasoning Table handy for use as students bring up relevant questions.