Cooperative learning for 408/508

1. Groups for lab work and lab reports.
2. Reason for using cooperative learning.
3. WWW page for cooperative learning.
5. Objectives of group work.
6. Individual accountability.
7. Periodic group-assessment.

Individual work needed:

Pre-labs  
Lab notebook  
Presentations (exception for Ugrads who will team present)  
Graduate project/lab
Cooperative Learning

1. Positive interdependence
2. Individual accountability (with every report)
3. Face-to-face interaction
4. Appropriate use of interpersonal skills
5. Regular self-assessment of group functioning (with every report)

Cooperative learning is not:

   Group projects with one or two students doing all the work

WWW for cooperative learning:

http://www.ncsu.edu/felder-public/Cooperative_Learning.html
http://www.co-operation.org/
Benefits of Cooperative learning

1. Student-faculty interaction
2. Student-student interaction
3. Information retention
4. Academic achievement
5. Higher-level thinking skills
6. Higher motivation
7. Teamwork, interpersonal skills
8. Understanding of professional environment
9. Communication skills

Why it works:

* Active learning
* Groups keep going (alone you give up earlier)
* You see alternative problem solving strategies of colleague
* Cognitive rehearsal: You learn best what you have to teach to a colleague
Goals

1. Prepare lab reports as a group and work in the laboratory as a team.

2. Increase your personal communication skills and interpersonal skills in a group setting.

Individual accountability

1. Groups are responsible for seeing that non-contributors will not be listed on the lab report.

2. Everybody in your group (and yourself) will rate your contribution six times. Rating can result in different grades per person. You have to hand in an individual effort rating sheet when you hand in the lab report (thus 6 times). The effort rating is confidential, please hand it to me in a taped recycled envelope.

3. Everybody in your group should be able to answer questions about your homework or design project. Everybody should be able to present your work.

4. Last resort: Firing and Quitting.
STUDENT HANDOUT
ENVE408/508

Goals and Expectations Form

Group # _________

List all the goals and expectations your group has (one form per group). The goals and expectations of our group are:

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Name of team member       Signature       E-mail address

_________________________  _____________  ______________

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STUDENT HANDOUT

Periodic group-assessment

Group # _________

After finishing every lab report, assess the group. This assessment is handed in at the same time as the report. It should be filled out as a group effort. For example, how well are we meeting our goals and expectations; what are we doing well; what needs improvement; what will we do different next time?

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Name of team member  Signature

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