

CPET-233 Digital Systems Design Fall 2019

"What is the most effective method of teaching?" "Students Teaching each other"

Group Homework:

For this course, all homework will be done in groups of three students (group size may vary based on class enrollment). The groups will be selected using group formation software designed to create heterogeneity.

- Why group homework? Cooperative learning offers the benefits of students teaching each other, students learning to work with peers (engineers don't work alone), and students being accountable for their work.
- Why can't we pick our own groups? Firstly, you can't pick your coworkers once you are in industry. More importantly, research has shown that heterogeneous groups are more effective than homogenous groups.

I have research to support my answers to both of the questions above.

How it works:

Each Wednesday a new homework will be assigned that will be due one week later. Your group should get together for about three hours and work on it together. The important piece is that you work on it TOGETHER. The intent is not for one person to do part one, another to do part two, etc.

For each assignment there are three roles, recorder, checker, coordinator/monitor and you must rotate these roles each week.

- Recorder: This person does the typing and/or writing of the codes and solutions
- Checker: This person checks all of the work before submission. This role also ensures that codes are sufficiently commented and adds comments as necessary.
- Coordinator/monitor: This person coordinates the meeting and is responsible for keeping the group on task. This person is also responsible for any communication with the instructor for the week.

Midway through the semester new groups will be formed.

When it doesn't work:

For your first homework assignment you will draw up a group expectations contract that you will all agree upon and sign. Theoretically that would serve to prevent conflict and ensure all group members pull their own weight. Realistically, though, there may be problems. In the event that you feel the team is not working out and attempts to resolve the issues within the terms of your contract are not successful, please contact me. I will facilitate a team meeting to help your group work towards a solution



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Grading:

All group members will receive the same grade for each assignment. If there are extenuating circumstances that prevent one group member from participating, please bring that to my attention.

The homework should be submitted in the dropbox for that week's checker. Include the following table that will be updated each week:

| Assignment | Recorder | Checker | Coordinator/Monitor |
|-------------|----------|---------|---------------------|
| Homework #1 | Curly | Larry | Moe |
| Homework #2 | Moe | Curly | Larry |
| Homework #3 | Larry | Moe | Curly |
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