

PHY151/152 Laboratory Teamwork Student Guide

In the real world, as well as in many aspects of your University studies, you work in teams. This guide is meant to give you some ideas and tips about how to work effectively in teams of 2 or 3 on your laboratory experiments in this course.

Teamwork Basics

Two things get accomplished in good teams: the task gets accomplished *and* the satisfaction of team members is high. In order to achieve both of these ends:

- Get to know other members of your group and their strengths
- Set ground rules
- Use a facilitator
- Keep lines of communication open
- Know how to avoid (or solve) common problems

Ground Rules

Setting some basic ground rules helps to insure that everyone is in agreement about how the team will operate. You will want to establish norms about how work will be done, the role and responsibilities of a facilitator, how you will communicate with one another, and how your meetings will be run. Some of the ground rules can be decided on now; others will develop as the semester progresses.

1. **Work Norms:** How will work be distributed? Who will keep track of the time-limit? What happens if someone doesn't follow through on his/her commitment (for example, is going far too slow)? How will the work be reviewed? What happens if people have different opinions about the quality of the work? What happens if people have different work habits (e.g., some people like to get assignments done right away; others work better with the pressure of a deadline).

2. **Facilitator Norms:** Will you use a facilitator? How will the facilitator be chosen? Will you rotate the position? What are the responsibilities of the facilitator? (see below)

3. **Notebook Norms:** How exactly will the notebook be kept. Will everyone share it equally, or will a note-taker be used. How will the note-taker be chosen? Will you rotate the position? What are the responsibilities of the note-taker?

About Goals: Often there is the unstated assumption in student teams that everyone wants to get an "A" in the course, and that should be the team's primary goal. But there may be other goals you want to consider as you work together during the semester. These include: having a high level of camaraderie in the team, learning about how to work together on a team-based project, or learning how to interact with others as a member of a team.

The Responsibilities of the Facilitator

The facilitator is not necessarily the group's leader although he/she can be. It is better to think of the facilitator as the person who keeps the group progressing in the right direction (i.e., toward productivity). Therefore, the facilitator should:

- Focus the team on the task (both short term and long term)
- Get participation from all team members
- Keep the team to its agreed-upon time frame (both short term and long term)
- Suggest alternative procedures when the team is stalled
- Help team members confront problems
- Summarize and clarify the team's decisions

Hints for Handling Difficult Behavior

Just one difficult personality in a group can make the group unproductive and the teamwork experience unpleasant. Here are some suggestions for resolving problems:

<i>How the Person Acts</i>	<i>Description</i>	<i>What to Do</i>
Overly Talkative	This person is usually one of four types: (a) an "eager beaver"; (b) a show-off; (c) very well-informed and anxious to show it; (d) unable to read the responses of others and use the feedback to monitor his/her own behavior.	Sometimes humor can be used to discourage people from dominating the discussion; be sure when the person stops talking to direct the conversation to another person. If the person's behavior can't be changed subtly, one member of the group should speak to the person privately and explain that while his/her enthusiasm is appreciated, it's only fair to the whole group that every person gets an equal amount of air time.
Too quiet	The quiet person may be: shy, bored, tired, unsure of himself/herself, uninvolved in the group.	Make a special effort to draw this person out: ask for his/her opinion on something; ask him/her something about himself/her- self; tell the person you appreciate his/her participation.
Argues	Is the person critical of ideas, the group process, or other group members?	If the person is critical of ideas, use that response to test the work the group is doing-- the person may be providing good feedback. If he/she is critical of others, tell him/her how the effect that is having on both the team or individual team members. Be explicit about the fact that his/her behavior is detrimental to the goals of the team.

Complains	The person may have a pet peeve, or may complain for the sake of complaining.	Listen to the person's complaint; if it is legitimate, set aside group time to solve the problem. Point out that part of your work this semester is to learn how to solve problems. Ask the person to join with you to improve whatever is disturbing him/her.
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Hints for Handling Group Problems

Besides problems with individual team members, the team as a whole may run into some difficulties. Here are some suggestions for dealing with teams that aren't functioning properly:

Floundering

Groups are often not as productive as they could be especially when people are just getting to know one another and how each person works. Drawing up a list of tasks to be accomplished can help. So can saying something like: "What do we need in order to move forward?" or "Let's see if we can all come to an agreement about what we're trying to accomplish."

Going Off on Digressions and Tangents

Group members may get caught up in chatting about things not central to the work at hand. A little of this can be O.K. because it helps to put people in contact with one another. But if that kind of conversation continues to dominate the group, it can be detrimental to progress. Things to say include: "Can we go back to where we were a few minutes ago and see what we were trying to do?"

Making a Decision Too Quickly

Sometimes there is one person in the group who is less patient and more action-oriented than other group members. This person may reach a decision more quickly than others and pressure people to move on before it is a good idea to do so. Someone could say:

"Are we all ready to make a decision on this?"

"What needs to be done on this before we can move ahead?"

"Let's check and see where everyone stands on this."

Not Making a Decision

The best way to make a decision is by consensus with all team members agreeing on the decision together. As you are discussing various ideas, try to be open to what each person is saying. Remember you are trying to come to the best decision for the group as a whole, not for any one person.

Feuding Between Group Members

A conflict--either related to a work project or to something outside of the group--can erupt and impede the group's progress. Usually nothing can be accomplished until the conflict is resolved. If that is the case, the parties need to discuss the problem, using the listening techniques that have been discussed.

Ignoring or Ridiculing Others

Subgroups or factions can form in groups with one or more people excluded. Sometimes the people who are outside of the "in" group will be the subject to criticism or ridicule. Knowing how to work with people we're not necessarily comfortable with is an ability that will serve you well in the work world. Each group member must make every effort to work with every other group member.

The Group Member Who Does Not Do His/Her Share of the Work

A group member may be unwilling to cooperate with others, may not complete assigned tasks, or may not come to meetings. You should be talk directly with the person to tell him/her the effect his/her actions are having on the group.

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Last revision: September 27, 2013 by Jason Harlow