Help Session Leaders
Physics and Astronomy Department
Calvin College

Job Description

Responsible to: Department Chairperson and Instructors

Purpose of the job: To provide assistance in the evenings to students seeking help with problem sets from various classes.

Primary functions:
   To help students solve the problems themselves by leading them to employ a variety of problem-solving skills.

Necessary skills, abilities and qualifications:
   1. Completion of at least one major sequence course beyond Phys235, and a good overall GPA in physics courses.
   2. Excellent interpersonal skills for interacting with students.
   3. Ability to “think on one’s feet” for answering students’ questions, with good problem-solving skills.
   4. Must be respectful, courteous, never condescending, prompt, and completely dependable.

Additional Information

The most important thing to remember when leading a help session is that the problem sets are meant to be a pathway toward understanding, and not an end in themselves. The leader should not be a breathing answer book. You should never solve problems for the students seeking assistance, but should help the students to solve the problems themselves. Although appropriate techniques can vary from situation to situation, two good rules of thumb are:
   1. Don’t write anything yourself unless absolutely necessary.
   2. As much as possible, ask questions instead of giving answers.

Always be courteous and never condescending. Try to make questioner comfortable asking questions and answering yours. Avoid using phrases such as “it’s obvious” or “this is simple” which may make a student feel ashamed to ask. Sometimes a very minor point is a roadblock to understanding. Encourage the students to make diagrams etc. and to use good practice in defining the problem clearly. Have them restate the problem on paper. You may even find your own problem-solving skills improve. Try to recognize multiple paths to the answer. Students may have an approach you hadn’t thought of.

Don’t be ashamed to admit you don’t know the answer or even that you aren’t sure where to begin. In this case, you can become a partner in exploring the problem with the students. They may learn enormously by seeing how you attack a problem that seems to be a stumper.

Finally, do dare to ask a professor if you are stumped. Talk to professors of Phys133/235 and Phys221/222 to request resources (copy of the textbook, list of homework problems assigned, even solution keys). This is for your reference, NOT to show any student attending help session.