

## Physics and Engineering PLO 5: Teamwork

**Program Learning Outcome:** Students will effectively collaborate in teams.

**Measure:** Teamwork survey taken, and faculty evaluation of the teams. This survey and evaluation is done in PHY304L.

**Criteria for success:** At least 75% of students will achieve an average score of 2.5 or higher on criteria described in teamwork rubric.

**Aligned with DQP Learning Areas:**

1. Specialized Knowledge
2. Broad Integrative Knowledge
3. Intellectual Skill/Core Competencies
4. Applied and Collaborative Learning
5. Civic and Global Learning

**Longitudinal Data:**

Peer team evaluation:

	2013-14	2014-15
N of Students	13	24
% above 2.5	86%	95%
average score	3.5	3.5
met criteria	yes	yes

**Additional Data:**

Faculty evaluation of teams. The team as a whole was evaluated on the first, second and sixth row on the rubric (focus, working together, and accomplishing goal):

	2013-14	2014-15
N of teams	4	8
% above 2.5	100%	88%
average score	3.0	3.3
met criteria	yes	yes

**Conclusions Drawn from Data:** Overall students tend to rate each other very highly. This motivated the addition of observations from the professor.

**Changes to be Made Based on Data:** The measurement instrument was changed after the first year. The second year a more detailed instrument was used in addition to data gathered from the professor. Further modifications may be helpful in the rubric (adding more specifics) to help guide students toward being more effective team members.

**Rubric Used:**

Evaluator: \_\_\_\_\_ Person Evaluated: \_\_\_\_\_

	Outstanding	High satisfactory	Low Satisfactory	Unsatisfactory
Focus on Task	<input type="checkbox"/> Stays on task all of the time	<input type="checkbox"/> Stays on task most of the time	<input type="checkbox"/> Stays on task some of the time with some reminders from group	<input type="checkbox"/> Hardly ever on task. Lets others do task
Extent to which works together	<input type="checkbox"/> A very strong group member who works hard and helps other in the group	<input type="checkbox"/> A strong group member who works hard	<input type="checkbox"/> Sometimes active group member but needs to try harder	<input type="checkbox"/> Frequently choosing not to help out
Meeting Habits	<input type="checkbox"/> On time to meetings or any assigned tasks	<input type="checkbox"/> Usually on time, and completes any assigned task	<input type="checkbox"/> Sometimes late for meeting or not completing tasks	<input type="checkbox"/> Late or absent for many or all meetings
Attitude while listening and discussing	<input type="checkbox"/> Respectful listener, discusses, and helps direct the group in solving problems	<input type="checkbox"/> Respectful, listens and asks questions	<input type="checkbox"/> Has trouble listening with respect and takes over discussions without letting others have a turn	<input type="checkbox"/> Does not listen or consider other's ideas. Blocks group from reaching agreement
Problem Solving	<input type="checkbox"/> Actively seeks and suggests solutions to problems	<input type="checkbox"/> Improves on solutions and suggestions given by others	<input type="checkbox"/> Does not offer solutions, but is willing to try solutions offered by others	<input type="checkbox"/> Does not try to solve problems or help others solve problems
Goal Completion	<input type="checkbox"/> Works to complete group goals	<input type="checkbox"/> Usually helps to complete group goals	<input type="checkbox"/> Occasionally helps to complete group goals	<input type="checkbox"/> Does not help to complete group goals