## Structure of Peer Teaching

As a way of preparing to teach the University of Minnesota's problem-solving labs and discussions sessions, you will have the opportunity to practice-teach one lab session to your peers. For two afternoons (Monday and Tuesday), the mentor TAs will supervise the practice teaching of the lab sessions.

There are two goals for this peer teaching. One is for you to get practice "running through" a lab problem, so that you have a sense of what it feels like to keep track of time, supervise a room full of people solving a problem, and lead a discussion. The other goal is for you to become familiar and comfortable with the equipment and typical results for the problem-solving labs.

The afternoon will be structured as follows:

- The "practice teacher" for one session will teach, and the practice teachers for the other sessions will act like undergraduate students. This means that you must come to the class having read through the Warm-up Questions, and be ready to participate in discussions and take data (See the peer teaching booklet for the lab problems).
- Each practice teacher will have about 40 minutes to teach one lab problem, and there will be 10 minutes to move on to the next session. During these 10 minutes, the practice teacher will receive teaching feedback from the observer, and the next practice teacher can prepare their lab room.
- The "students" for this lab session will give each practice teacher written feedback, on the peer teaching evaluation sheets (located at the end of the peer teaching booklet.)

Tentative Schedule Format (both for Monday and Tuesday Groups)

|  | $\mathbf{1 : 0 0 - 1 : 4 0}$ | $\mathbf{1 : 5 0 - 2 : 3 0}$ | $\mathbf{2 : 4 0 - 3 : 2 0}$ | $\mathbf{3 : 3 0 - 4 : 1 0}$ | $\mathbf{4 : 2 0 - 5 : 0 0}$ | $\mathbf{5 : 1 0 - 5 : 5 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Group A | 1 | 2 | 3 | 4 | 5 | 6 |
| Group B | 2 | 3 | 4 | 5 | 6 | 1 |
| Group C | 3 | 4 | 5 | 6 | 1 | 2 |
| Group D | 4 | 5 | 6 | 1 | 2 | 3 |

Problem numbering (in peer teaching booklet):
1: 1101 Lab 1 Problem \#4 - Motion Up and Down an Incline (page 14)
2: 1101 Lab 2 Problem \#3 - Projectile Motion and Velocity (page 17)
3: 1201 Lab 2 Problem \#4 - Normal Force and Frictional Force (page 20)
4: 1201 Lab 3 Problem \#1 - Elastic and Gravitational Potential Energy (page 24)
5: 1301 Lab 2 Problem \#4 - Bouncing (page 27)
6: 1301 Lab 3 Problem \#2 - Forces in Equilibrium (page 31)
Note: You will be given a list of room locations prior to the peer teaching session.

Monday Sessions

## GROUP A

1. 
2. 
3. 
4. 
5. 

Tuesday Sessions

GROUP B
6.

GROUP A
1.
1.
2.
3.
4.
5.
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2.
3.
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5.
6.
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4.
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$x_{0}$
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## GROUP C

1. 
2. 
3. 
4. 
5. 

## GROUP D

1. 
2. 
3. 
4. 
5. 

GROUP C
1.
2.
3.
4.
5.
6.

## GROUP D

1. 
2. 
3. 
4. 
5. 

## Peer Teaching Checklist (for Observer)

| What the TA Does | Observer check: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opening <br> Moves: | (0) Be at the classroom early |  |  |  |  |  |  |
|  | (1) Prepare students for group work by showing group/role assignments. |  |  |  |  |  |  |
|  | (2) Prepare students for lab by: <br> a) diagnosing difficulties while groups discuss and come to consensus on Methods Questions. |  |  |  |  |  |  |
|  | b) selecting one person from each group to write/draw on board answers to the Methods Questions. |  |  |  |  |  |  |
|  | c) leading a class discussion about the group answers. |  |  |  |  |  |  |
|  | d) telling students how much time they have to check their predictions; reminding Manager to keep track of time |  |  |  |  |  |  |
| Middle Game | (3) Coach groups in problem solving (making decisions) by: <br> a) monitoring (diagnosing) progress of all groups |  |  |  |  |  |  |
|  | b) helping (coaching) groups with the most need, using group roles. |  |  |  |  |  |  |
|  | (4) Grade Lab Procedure (journal). |  |  |  |  |  |  |
|  | (5) Prepare students for class discussion by: <br> a) giving students a " 10 -minute warning." Pass out Group Evaluation Form (if necessary) |  |  |  |  |  |  |
|  | b) selecting one person from each group to put corrected methods questions and results on board. |  |  |  |  |  |  |
| End Game | (6) Lead a class discussion focusing on what you wanted students to learn from solving the problem. |  |  |  |  |  |  |
|  | (7) Discuss group functioning (optional) | $n$ | $n$ | $n$ | $n$ | $n$ | $n$ |
|  | (8) Start next lab problem (repeat Steps 1-7) if time | $n$ | $n$ | $n$ | $n$ | $n$ | $n$ |
|  | (9) End of Lab <br> a) Tell students what lab problems to do Methods Question for next week; if last session, assign students problems for lab report. |  |  |  |  |  |  |
|  | b) Leave a neat lab room for the next class. Do NOT let the next group of students into the classroom. Write down the comments about equipment that did not work on the labroom sheet. |  |  |  |  |  |  |
|  | Total: |  |  |  |  |  |  |

Observer Comments:

