**Name of Lesson / Activity**: Biomechanics class

**Teacher/Organizer:** Wylie Ahmed
**Helpers:**
**Date/Time:**

## I. Introduction (15 min)

Objectives:

Discuss "what is biomechanics?"

Materials:

Overheads/LCD Projector.
Powerpoint slides

Procedure:

Begin the lesson with the teacher introducing himself
Introduce concept of biomechanics
Physical activity
Discuss "what is biomechanics?"
Discuss objectives for the rest of the lesson.

## II. Biomechanics Problem Solving (60 min)

Objectives:

Learn to apply structural mechanics to biological systems

Materials:

Overheads/LCD Projector
Powerpoint slides

Procedure:

Solve example problem as a group (~15 min)
Discuss implications of problem (~5 min)
Solve problems in teams using their measurements (~25 min)
Break (~10 min)
Discuss implications of problem (~5 min)

## III. Mechanics of Exercise (10 min)

Objectives:

Learn how mechanics can be applied to exercise

Materials:

Overheads/LCD Projector
Powerpoint slides

Procedure:

Show how sit-up difficulty can be changed (~2 min)
Practice sit-ups (~5 min)

## IV. Biomechanics Research (5 min)

Objectives:

Show examples of biomechanics research and necessary courses

Materials:

Overheads/LCD Projector
Powerpoint slides

Procedure:

Show a few exciting examples of biomechanics research (~4 min)
List a few types of courses to study this topic (~1 min)