

CHEG 4137 and 4139

Pre-laboratory Report Worksheet: Sodium Dodecyl Sulfate-Polyacrylamide Gel
Electrophoresis (SDS-PAGE)

Complete this sheet with your group prior to your first lab session and turn it in to the instructor or TA.

Group Members:

1) What are the major learning objectives of this experiment? (Hint: Gaining experience with large scale equipment is not a major learning objective here)

2) During SDS-PAGE, why do polypeptides (or proteins) separate when placed in an electrical field? Why do some proteins migrate farther in a given amount of time than other proteins?

3) What variables could be changed in this experiment? How will the change of the variables affect the SDS-PAGE results?

4) How is the protein molecular weight determined in SDS-PAGE?

5) Where will the waste from this experiment be disposed of?

6) Create a detailed procedure for preparing and running hand-casted gels.

If your group will submit a video for this experiment:

7) What steps of the experiment will you capture on video?

8) What are the safety hazards to be especially aware of when filming the experiment?

