

Week	Lecture	Lab	Lecture	Assignments Due
1 9/24	<ul style="list-style-type: none"> • Overview of energy • Release Unit 1 	NONE	• Problem Session 1 – Solar Spectra	
2 10/1	• Guest Lecture – Sally Benson, Director of Stanford's Global Climate and Energy Project	NONE	• Problem Session 2	Tuesday – Problem Set #1
3 10/8	• Guest Lecture	<ul style="list-style-type: none"> • Introduction to multimeters, IR thermometer • Resistance vs. temperature for intrinsic/doped Si • Calculate carrier concentration as a function of temperature 	• Problem Session 3 – HW 2	
4 10/15	• Guest Lecture - Solar	<ul style="list-style-type: none"> • Resistance vs. incident light intensity/wavelength • Calculate theoretical increase in carrier concentration due to solar spectrum on Si and compare with experiment 	• Problem Session 4 – HW 3	Tuesday – Problem Set #2 Lab session - Lab#1
5 10/22	• Midcourse Evaluation	<ul style="list-style-type: none"> • IV curves w/ Keithley • Calculate R_s, R_{sh}, max P, efficiency • I_{sc} vs. filters • V_{oc} vs. temperature 	• Problem Session 5 – HW 3/4	Tuesday – Problem Set #3 Lab session – Lab #2
6 10/29	• Advanced solar cell designs	NONE	• Problem Session 6 – HW 3/4	Tuesday – Problem Set #4 Lab session – Lab #3
7 11/5	• Guest Lecture - Batteries	<ul style="list-style-type: none"> • Battery lab • V_{oc} for different electrode metals • I_{sc} vs of electrode surface area 	• Problem Session 7 – HW 5	
8 11/12	• Poster Session #1	PROJECT LAB TIME	• Poster Session #2	Tuesday – Problem Set #5 Lab session – Lab #4
9 11/26	• Poster Session #3	<ul style="list-style-type: none"> • Fuel cell lab from last year • Charging efficiency • Discharge efficiency 	Poster Session #4	<i>*Week before thanksgiving</i>
10 12/3	• Guest Lecture – Fuel Cells	PROJECT TEST	Review	Final