BIOE 121 - BIOMEMS AND MEDICAL DEVICES (4 UNITS)

(Taken from the UC Berkeley Course Guide (http://guide.berkeley.edu))

COURSE OVERVIEW

SUMMARY

Biophysical and chemical principles of biomedical devices, bionanotechnology, bionanophotonics, and biomedical microelectromechanical systems (BioMEMS). Topics include basics of nano- and microfabrication, soft-lithography, DNA arrays, protein arrays, electrokinetics, electrochemical, transducers, microfluidic devices, biosensor, point of care diagnostics, lab-on-a-chip, drug delivery microsystems, clinical lab-on-a-chip, advanced biomolecular probes, etc.

PREREQUISITES

CHEM 3A (chem3a.html), PHYS 7A (phys7a.html), and PHYS 7B (phys7b.html)

WORKLOAD

TIME COMMITMENT

3 hours of lecture and 1 hour of discussion per week.

COLLEGE OF CHEMISTRY PEER SERVICES

Made by Angela Lee, c/o 2019

(https://w[illegible]y.edu/ugrad/curr

lang=en) students/peer-

advising