**Physics Department Senior Design Program**

Summary

The senior design experience provides students in Engineering Physics with opportunities to apply fundamental principles, use practical training, develop planning and organization skills and produce both informal and formal reports while working on unstructured projects that authentically parallel the challenges that they can expect to encounter as working scientists and engineers after graduation. The projects are developed under the course, Senior Design Practice (PHGN 481/482), which is supervised by faculty mentors, working under the direction of the Senior Design Oversight Committee (SDOC). These activities are coordinated with the related classroom course (Senior Design Principles, PHGN 471/472), under separate registration, in which independent study techniques and professional practice issues are discussed.

Timeline

- Early summer before fall semester
    - SDOC solicits project descriptions from potential faculty mentors through a Request for Proposals
- Early August, before fall semester
    - Project proposals due from potential mentors
- Prior to start of fall semester
    - SDOC finalizes identification of approved projects and mentors
- First week of class, fall semester
    - First meeting of the Principles course during its regularly scheduled hour
- Second week of class, fall semester
    - All students are aligned by SDOC with mentors, most of these are teams
    - Honors Senior Design proposals due (for evaluation by SDOC)
    - All students sign performance contracts and submit these to SDOC
- End of first semester
    - Interim report due to both the faculty mentor and the instructor of the Principles course
    - Formal evaluation of lab notebook and oral assessment by faculty mentor
- First week of class, spring semester
    - Continuation meeting of the Principles course
- End of second semester
    - Poster session, late afternoon or evening
    - Final report due to both the faculty mentor and the instructor of Principles