

Physics Department Retreat

Thursday May 15th, 2003

Lake Wheeler Conference Center

"Rethinking graduate and undergraduate curricula"

Theme: For half a century or more, graduate programs have been defined by courses out of texts like Goldstein and Jackson. Fitness to proceed on to do physics research has been defined by success in qualifier exams on classical mechanics, E and M and quantum mechanics. At the introductory level, inclined planes and velocity-time graphs have figured prominently for hundreds of years. How do we make intellectual space for new ideas, new ways of teaching, new interdisciplinary curricula such as nanotechnology and biophysics? Come and help think about the shape of the graduate program and the introductory physics sequence in the coming decades.

Who: All faculty, EPA personnel with teaching duties, GPSA president or designate (*register with Becky Savage by Monday May 12 to confirm attendance*)

Directions to Lake Wheeler Conference Center: From campus, take Centennial Parkway to Lake Wheeler Rd. Turn right (south) and follow Lake Wheeler about 4.8 miles. The park entrance is on the right. Follow the park road to the end; the conference area is in the building by the Lake.

Directions to Reynolds/Osborne 5429 Blue Sage Rd: On leaving the park, turn left (north) onto Lake Wheeler Road. After about 1.1 miles, turn left (there's a left-turn lane) onto Enchanted Oaks Drive. Follow the drive until a T intersection at Blue Sage. Turn left. Number 5429 is on the left.

Agenda

Additional short contributions related to the topics are welcome. Contact the moderators. An overhead projector and an LCD projector will be available.

7.45 - 8.30 am Coffee, Tea and Pastries

8.30 - 9.15am State of the Department (Gould)

9.15 - 9.45am Strategic Plan: where next (Sayers)

9.45 - 10.15am Coffee Break

10.15 – 12.00pm Open discussion on the graduate academic program: Moderator- Michael Paesler with opening remarks on "Foundations and Specializations" by advisory committee members Chris Roland, Harald Ade, Lubos Mitas.

12.00 -1.30pm Cold buffet lunch (with vegetarian options)

1.30 – 3.30pm Open discussion on the introductory physics sequence (particularly PY205/208): Moderator - Ruth Chabay, with opening remarks on Matter and Interactions in PY205/208 at NCSU by Bruce Sherwood. Comments on general introductory curriculum issues by David Haase, Richard Mowat, John Hubisz

3.30-4.00 pm Wrap up and adjourn to Chez "Reynolds-Osborne"