

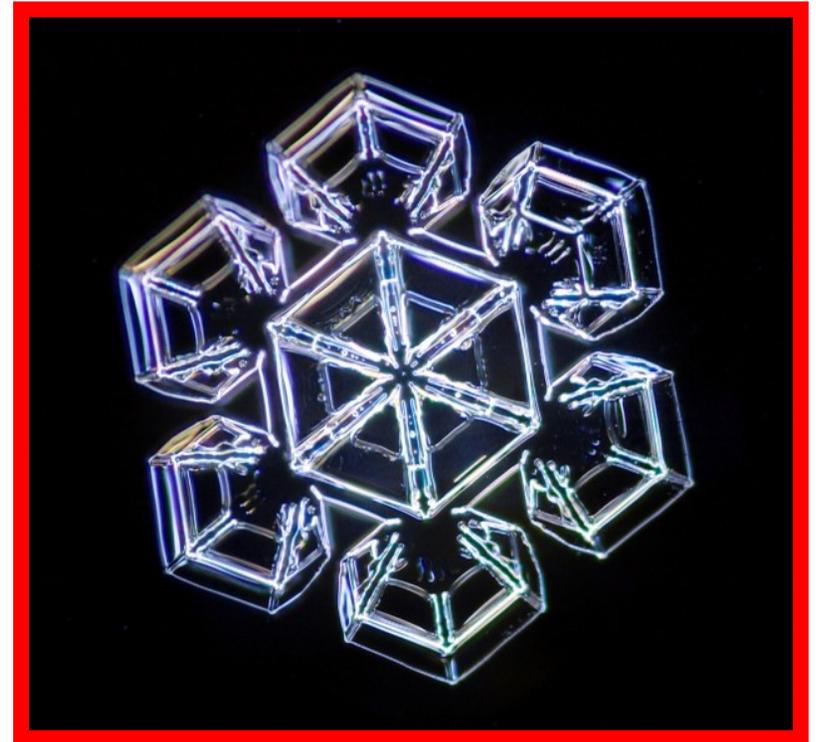
# PEP 8306 Principles of Scientific Enquiry

## Class 1

Section # 15531

Fall Semester 2007

Mondays, 5:30 to 8:30pm



# **Introduction**

- **PEP 8306 - Principles of Scientific Enquiry** serves as the introductory experience in the Ph.D. (Kinesiology) program in Health and Human Performance.
- PEP 8306 is designated as the residency course for the Ph.D. program within the College of Education.
- Overall goal of PEP 8306 is to provide students with the conceptual and practical skills required to develop logical and coherent **research** frameworks that can be applied through-out their research careers.
- A secondary goal of PEP 8306 is to orient new graduate students to the Ph.D. program and provide information to students on the program structure and to define expectations from both faculty and student perspectives.

# **The Million Dollar Question!!**

- **Why are you here??**

- Your goals as a student within the program.
- Your long-term professional goals.
- Your perception of what it is that you will learn as a graduate student.
- Your expectations of what you will gain from completing a Ph.D. (Kinesiology).
- Your perception of what it means to be a **Ph.D. Research Scientist.**

# *Ph.D. Program Goals*

- The Department of Health and Human Performance degree of Doctor of Philosophy in Kinesiology is designed to provide doctoral level training to prepare a professional with the cognitive and research skills needed to be a productive scholar in the discipline of Kinesiology. The objectives of the Ph.D. in Kinesiology are:
  - To train scholars with the capacity to understand and conduct research in kinesiology.
  - To train scholars with the capacity to develop and evaluate programs consistent with the national health promotion and disease prevention objectives of Healthy People 2010.
  - To train scholars with the capacity to prepare fundable research and program development proposals.
  - To train individuals with the capacity to be successful in higher education and kinesiological settings in the public and private domains.
- Departmental Website: [www.hhp.uh.edu](http://www.hhp.uh.edu)

# **Program Administration**

- Ph.D. (Kinesiology) and M.S. (Exercise Science) are both administered by the Graduate Research Degrees (GRD) Committee within Health and Human Performance.
- The GRD committee is ultimately responsible for all decisions concerning the structure, content and format of the degree program.
- GRD committee membership is by invitation and all faculty members that serve on the GRD committee must satisfy certain membership criteria.
- Only GRD committee members are eligible to supervise graduate students (M.S and Ph.D.) within HHP.

# Program Administration

- GRD Committee Membership Criteria

- Over-arching policy statement: A faculty member eligible for GRD membership must demonstrate the ability to independently direct doctoral research.

- This is defined by the following criteria:

- **A)** the faculty member must have an ongoing, focused research agenda as evidenced by refereed journal articles, grant writing, research presentations.

and

- **B)** the faculty member has Dissertation/Thesis experience as evidenced by having served as Chair or Co-Chair of doctoral dissertations or Master's thesis committees at UH or other academic/research institutions.

- GRD committee members are subject to review to maintain membership status. This review will be on a three year basis after initial membership is granted.

# **Program Administration**

- HHP has a total of 25 faculty members.
- GRD Committee has a total of 12 faculty members from HHP.
- Present GRD Committee membership.
  - Six, tenured senior faculty.
  - Six, tenure-track junior faculty.
- Chair of the GRD Committee is elected by the GRD committee membership to serve a two year term.
- Present Chair – Dr. Mark Clarke (Term: 2006 – 2008).
- One member of the GRD committee serves on the COE Graduate Studies Committee.

# **Faculty Review/Assessment**

- Faculty members join the department on a five tenure track.
- Tenure decision is made in the fifth year after review of a faculty members performance over in three separate areas:
  - Scholarship and Research (i.e. peer reviewed publications, books, book chapters, grant applications, etc.)
  - Teaching (i.e. student evaluations, faculty evaluations, teaching materials, etc.)
  - Service (i.e. departmental, college and university committees, review panels, journal reviews, etc.)
- Review is based on performance throughout professional career (i.e. graduate, post-doctoral and tenure-track).
- Tenure decision is based upon review by Departmental, College and University Promotion and Tenure Committees with final decision resting with the Provost and President of the University.

# ***Assessment Outside of Academia***

- Depends on the particular setting and actual job description, but always involves a contract (usually short-term)
- Example: annual review by board of directors
  - Research productivity (i.e. number of peer reviewed publications, books, book chapters, professional presentations, etc.)
  - Educational programming (i.e. maintain accreditation, identify needs, develop programs, evaluation, etc.)
  - Administrative (i.e. budgeting, goal planning, staffing, coordination with other labs/departments, etc.)
  - Service (i.e. journal reviews, interdepartmental, teaching, professional associations, etc.)

# **Ph.D. (Kinesiology) Program Goals**

- To train the next generation of Ph.D. research scientists in Kinesiology and related areas.
  - Academic (i.e. college professor)
  - Industry (i.e. public and private research)
  - Programmatic (i.e. develop, guide and oversee)
- Reality is that a well-trained Ph.D. research scientist should be capable of functioning in any of these roles.
- As Ph.D. faculty, our goal is to develop both your professional skills and personal perspectives to allow you to be successful in your chosen career path.
- If you graduate from this program, you and your faculty will be confident that you can function successfully in any professional role you choose to pursue.
- Ph.D. research scientists share many common skills regardless of the specific field of study.
- **Goal of PEP 8306 is to begin to teach you these skills.**

# *Ph.D. (Kinesiology) Program Goals*

- **Common skills**

- Critical thinking, critical writing and the ability to communicate pertinent information.
  - Ability to identify the “problem”.
  - Ability to review existing research in a critical manner.
  - Ability to formulate a research agenda based on critical review of existing and planned research approaches.
  - Ability to conceptualize and communicate ideas in a coherent fashion to your colleagues.
  - Ability to communicate to others these concepts and ideas in a common format accepted by the academy.

## **Ph.D. (Kinesiology) Program Milestones**

- Qualifying Exam (end of the 1<sup>st</sup> academic year).
- Residency (first academic year).
- Annual Review (end of every academic year).
- Candidacy Paper
- Advancement to Candidacy
- Comprehensive Exams
- Formation of Doctoral Dissertation Committee.
- Dissertation Proposal
- Dissertation Research
- Dissertation Defense

## *Ph.D. (Kinesiology) Program Milestones*

- **Qualifying Exam (end of the 1<sup>st</sup> academic year).**
  - What is the qualifying exam?
  - What is its purpose?
  - How will you prepare for the exam?
  - How is it assessed?

## **Ph.D. (Kinesiology) Program Milestones**

- **Residency (first academic year).**
  - What is residency?
  - How are the residency requirements fulfilled?
    - Apply to COE Graduate Studies Office for residency (see attached form).
    - Successfully complete PEP 8306.
    - Maintain a “professional activities” log
      - Advisor contact, research experiences, seminar attendance, thesis/dissertation defenses, professional experiences, etc. (see attached form).

# **Ph.D. (Kinesiology) Program Milestones**

- **Annual Review (end of every academic year).**
  - Review performed by your advisor and includes:
    - academic performance in class
    - details of involvement in research projects
    - student feed-back on their perception of the progress they are making in the program.
    - Advisor assessment of the students progress.
    - Advisor generated decision on whether or not the student is making “adequate progress” towards completion of the degree.
    - (see attached review form)
  - GRD Committee review of the final decision.
  - Three potential outcomes of the annual review process
    - Adequate progress
    - Probation
    - Termination from program (after failure of probationary period)

## *Ph.D. (Kinesiology) Program Milestones*

- **Candidacy Paper**

- Student must have completed a total of 21 hrs drawn from the research and discipline core.
- Normally, students will have completed their candidacy paper within two years of entering the program.
- What is the candidacy paper?
- What is its purpose?
- How is it assessed?
- Core classes ([hhp.uh.edu](http://hhp.uh.edu))

## *Ph.D. (Kinesiology) Program Milestones*

- **Advancement to Candidacy**
  - Administrative Step
  - Successful completion of Candidacy Paper.
  - Completion of research core classes (at least 12 hr) and additional 9 hr of discipline core classes (Total of 21 hr required).
  - Degree plan must be on file with the COE Graduate Studies Office (degree plan can be changed by petition via the GRD Committee).

# ***Ph.D. (Kinesiology) Program Milestones***

- **Comprehensive Exams**

- Must have completed 45 hr in the program prior to sitting comprehensive examination.
  - 15 hr departmental research core classes
  - 15 hr of discipline core classes
  - 15 hr of specialized classes in specific research area (includes 6 hr from outside COE and can include Special Problems classes).
- What is covered in the comprehensive exams?
- How are they assessed?
- What happens if you fail the comprehensive exam?

## *Ph.D. (Kinesiology) Program Milestones*

- **Dissertation Research**
  - What is doctoral dissertation research?

# *Ph.D. (Kinesiology) Program Milestones*

- **Formation of Doctoral Dissertation Committee.**

- Must have successfully completed comprehensive examination.
- How is your committee formed?
- What are the criteria for faculty members that sit on your committee?
- What are the roles played by these faculty members?
- What is your role as a doctoral candidate in this process?

# *Ph.D. (Kinesiology) Program Milestones*

- **Dissertation Proposal**

- What is a dissertation proposal?
- Who is responsible for developing the proposal?
- What is your role in this process?
- What does the proposal consist of?
- What can you expect during this process?
- How is your dissertation proposal defense conducted?

# *Ph.D. (Kinesiology) Program Milestones*

- **Dissertation Defense**
  - What?
  - Where?
  - How?

## *Ph.D. (Kinesiology) Program Milestones*

- **GRADUATION!!!!!!**

# *Why become a Ph.D. Scientist?*

- **Independence**
- **Opportunity**
- **Discovery**
- **Authority**

# **Class Assignments**

- **Readings**
  - *Research Design – Qualitative, Quantitative and Mixed Methods Approaches (Chapter 1 – PDF on web-site)*
- **Written Assignments**
  - *In no more than three paragraphs provide a written explanation of your personal motivation for wanting to become a Ph.D. research scientist and why you joined this particular program. Your submission will be shared with your fellow classmates.*