

Introduction to Course

HPHY 6605
2012

Expectations of Students

- Achieve an understanding of:
 - Natural and man-made sources of radiation and radioactivity in the environment
 - Regulations and standards affecting environmental radioactivity; biological bases
 - Monitoring of environmental effluents
 - Surveillance of the ambient environment
 - Selected topics in advanced surveillance techniques

Introduction to Course

- Radiological Environmental Monitoring & Surveillance
 - An overview course - any of the lecture topics could be expanded
- Introduction of instructor
 - gesethom@isu.edu (preferred)
 - 282-3669 (office)
 - 221-2108 (mobile, urgent items only please)
 - Room PS 105
 - Office hours: if door open or by appointment
- Introduction of students

Texts and References

- Texts
 - Environmental radioactivity, Fourth Edition, Merril Eisenbud and Thomas Gesell, Academic Press, San Diego, California (1997)
 - Environmental regulatory guide for radiological effluent monitoring and environmental surveillance, DOE report DOE/EH-0173T, US DOE, Washington, DC (2004 update)
- References are listed in the syllabus

Course Materials

- Course materials will be provided electronically in Acrobat format (pdf)
- They can be downloaded from

www.physics.isu.edu/~gesell/PHYS605.html

Evaluation of Students

- Term papers (continued)
 - You may focus on a particular source, radionuclide, class of radionuclides, exposure situation, monitoring methodology, or...?
 - Use the author-year reference and citation system employed in recent issues of Health Physics Journal
 - 10-15 pages in length, double spaced and typed
 - Use several appropriate sections clearly identified
 - Pay attention to grammar, syntax, and spelling

Evaluation of Students

- Exams – essays and problems
 - One midterm take-home exam
 - Take-home final exam
 - 3 weeks between distribution and collection
- Term papers
 - Please read and follow the **“Guide for writing and presenting the term paper”** in the syllabus
 - To be presented orally and submitted in writing (see syllabus for details)
 - Pick something you want to learn more about

Evaluation of Students

- Term papers (continued)
 - Figures and tables should be used as appropriate
 - Use about 10 references
 - Most references should be technical
 - Information from the popular press or anti-nuclear literature can be used to illustrate public concerns but not for basic factual information
 - Use Wikipedia sparingly if at all
 - Papers substantially similar to those submitted to other ISU classes are not acceptable

Evaluation of Students

- Oral Presentation of Term papers
 - 15 minutes plus 2-3 minutes for questions
 - Preferred software is PowerPoint
 - Use font sizes legible to the audience
 - Make sure all tables, charts, diagrams, etc. are legible
 - If you say “I know you can’t read this, but...,” you are cramming in too much information
 - A subtle background on the slides is OK

Getting the Most from the Class

- Do not expect to learn everything you want to know during class periods – they are only one of many resources
- Use the library, Internet, fellow students, and other resources to obtain information
- Texts and other written materials will be supplemented with recent advances and personal experience where appropriate

Important Dates (bold on schedule)

- Feb 29: Midterm exam distributed
- Mar 21: Midterm exam due
- Apr 04: Final exam distributed
- Apr 11: Students submit paper outlines
- Apr 25: Students present papers orally
- Apr 27: Term paper and final exam due
- Exams and term papers may be emailed to: gesethom@isu.edu, handed in during class or placed in my mailbox in PS 120

Getting the Most from the Class

- An important benefit of class is discussion and sharing of knowledge - I expect to learn from you also
- Although the distance learning format can be awkward, you are encouraged to ask questions in class

Ethics

- ISU academic dishonesty policy applies
- Students unfamiliar with it should review
 - The Student Handbook, pages 9-10
<http://www.isu.edu/studenta/handbook.pdf>
 - The Faculty/Staff handbook
http://www.isu.edu/policy/fs-handbook/part6/6_9/6_9a.html

Disabilities

- Our program is committed to all students achieving their potential
- If you have a disability (physical, learning, hearing, vision, psychiatric) that may need a reasonable accommodation, please contact ISU Disability Services located in the Rendezvous Building, Room 125as early as possible (282-3599)
- <http://www.isu.edu/ada4isu/students.shtml>