
<i>Instructor:</i>	N. Sanjay Rebello	
<i>Office:</i>	Cardwell 503 (The elevator goes up to the 4 th floor. Call me if you need assistance.)	
<i>Classroom</i>	Cardwell 041	
<i>Class Meeting</i>	Wednesday 2:30 – 4:20 P.M.	
<i>Office Hours:</i>	Tuesday & Thursday 3:00 – 4:00 P.M. and by Appointment	
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Goals

The overarching goal of this course is to familiarize you with the recent advances in physics, particularly those at K-State and also to make you better prepared to be a physicist of the future.

Class Activities

You will participate in the following activities in class.

Learning about Physics Research

To introduce you to the cutting-edge research in physics at K-State, on most class meetings you will have a presentation by a K-State faculty member talking about her/his research. You are expected to participate by asking questions and engaging in any discussion or activities that the speaker has planned. The schedule for the research talks will be placed on the K-State Online course webpage.

Problem Solving

Problem solving is the most highly skills by prospective employers of physics graduates (source: <http://www.aip.org/statistics/>). Therefore, we will pay considerable importance in this course to develop your problem solving skills. At each class meeting you will work in groups to solve physics problems that are relevant to the physics classes that you are currently taking.

Research Presentation

Another important professional skill is the ability to effectively communicate your ideas. We will help you develop this skill through making classroom presentations. Each one of you will make at least one 15-minute classroom presentation in this course. The oral presentation will be based on a physics paper or journal article that you find interesting and/or your conversations with a physics faculty member about her/his research. Your research presentation is worth 20% of your course grade.

Out-of-Class Activities

You will complete the following activities outside of class.

Summaries of Research Talks

You are required to hand in a written one-page summary for each research talk that is presented in class. You will upload the summary onto the K-State Online course website. These summaries together are worth 15% of your course grade.

Communicating with a Faculty Member about their Research

You will talk to at least two faculty members about their research during this semester. You will write a two-page summary of each conversation and submit it the 1st class meeting in the months of March and April. You will upload the summary onto the K-State Online course website. These summaries together are worth 15% of your course grade.

Texts & Other Resources

There is no formal textbook for this course. However, there will be a K-State Online course website (<http://www.online.ksu.edu>) on which useful information will be posted, as well as links to other resources will be provided.

One important link which you should refer to is at the American Physical Society website: <http://www.aps.org/careers/student/undergraduate.cfm>

Grades

Course grades will depend on all aspects of the class with the distribution listed below:

Class Participation (overall grade)	50%
Summaries of Research Talks (about one each week)	15%
Summaries of Discussion with Faculty Member (three)	15%
Research Presentation (one)	20%

Other Related Activities

You are strongly encouraged to attend the Physics Department colloquium on **Monday, 4:00-5:00** in **Cardwell 102**. These colloquia provide a good sampling of current research in the field as well as good (and some not so good) examples of effective presentations.

Coffee and Cookies are available in CW 119 just before the colloquium. These informal gatherings are a good opportunity to meet with faculty, students and other members of the department.

Disabilities

If you have any condition such as a physical or learning disability, which will make it difficult for you to carry out the work as I have outlined it or which will require academic accommodations, please notify me and contact the Disabled Students Office (Holton 202), in the first two weeks of the course

Plagiarism

Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper or project; failure in the course; and/or expulsion from the University. For more information refer to the "Academic Dishonesty" policy in K-State Undergraduate Catalog and the Undergraduate Honor System Policy at <http://www.ksu.edu/honor/>