PHYSICS 303
Physics for Secondary Teachers

Summer 2003

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Course Instructor
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 http://www.umr.edu/~pringle/phys31

Course Description

Physics 31 is a 3-hour physics course for secondary teachers. You will be introduced to some of the fundamental ideas of physics, including matter, energy, sound, electricity, magnetism, light and modern physics. This course is for practicing and prospective secondary science and math teachers. Other students may enroll with consent of the instructor.

Text

There is no text. Course material will be made available on the web.

Course Schedule

Physics 303 meets from 9:00-noon and 1:00-4:00 on Monday, Tuesday, Wednesday, and Thursday of two consecutive weeks. The class will meet in room 129 Physics. A preliminary set of homework assignments will be handed out along with this syllabus.

Hour Examinations and Final Exam

There will be no written exams for this “first run” of the course.

There will be ample opportunity for “oral exams,” during which students demonstrate at the blackboard their mastery of course material.

Course Grades

The grading system for the course is listed under “homework.”
Make-Up Exam Policy

Because this course happens over such a short period of time, you should not plan on being absent. Absences due to adult circumstances beyond your control will be handled on a case-by-case basis.

Homework

There will be 16 problem-solving sessions, during which you will work problems related to recently-related course material. You will be expected to work these problems in cooperative groups, and then record your personal solution on paper to be handed in. Course grades will be assigned as follows:

- 14-16 solution sets completed: A
- 12-13 solution sets completed: B
- 10-11 solution sets completed: C
- 8-10 solution sets completed: D
- 7 or fewer solution sets completed: F

Course Material on the Web

Much of the material for this course will be available on the web. The URL will be http://www.umr.edu/~pringle; select the Classes and then the Physics 303 link. Or go directly to the class page at http://www.umr.edu/~pringle/phys303. Here are two excellent references giving an overview of the physics and math we will use:

- hyperphysics: http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html
- hypermath: http://hyperphysics.phy-astr.gsu.edu/hbase/hmat.html

E-Mail

You can send e-mail to me at pringle@umr.edu. Students frequently send me e-mail from accounts which are not their UMR e-mail accounts (e.g., a friend's computer, a Hotmail account). If you send e-mail from such an account and want a reply to your UMR account, be sure to include your UMR e-mail address.

Unresolved Complaints and Communication Problems

It is hoped that any communication problems or complaints about the course can be resolved in a collegial manner through discussions between student and instructor. However, if there are any complaints that cannot be resolved, you may take them up with the Physics Department Chairman, Dr. Paul Parris (parris@umr.edu) or the Dean of the College of Arts and Sciences, Dr. Paula Lutz (plutz@umr.edu).