PHYS 2212
SYLLABUS

**Course title:** Principles of Physics II

**Catalog Number:** PHYS 2212

**Class hours:** 3

**Laboratory Hours:** 2

**Credit hours:** 4

**Instructor:** Dr. Charles Johnson

**Office:** 121 B Stubbs Hall (Douglas)/ 146 Administrative Building (Waycross)

**Telephone number:** 912-260-4338 (Douglas)

**E-mail:** charles.johnson@sgsc.edu

**Class web page:** http://faculty.sgc.edu/cjohnson/Classes/Physics_II/Physics_II.html

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**Textbook**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Publisher</th>
<th>Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halliday, Resnick and Walker</td>
<td><em>Fundamentals of Physics</em></td>
<td>Wiley</td>
<td>9th</td>
</tr>
</tbody>
</table>

**Course Description**

An introductory course, which will include material from electromagnetism, optics, and modern physics. Elementary differential and integral calculus will be used. Prerequisite: PHYS 2211K and Corequisite: MATH 2254
Classroom rules of conduct

For the benefit of your fellow students and your professors, you are expected to practice common courtesy with regard to all course interactions. For Example:
- Smiley: **Show up for class on time.**
- Smiley: **Do not talk during class.**
- Smiley: **Turn off your cell phone.**
- Smiley: Do not leave class early, and do not rustle papers in preparation to leave before class is dismissed.
- Smiley: Be attentive in class; don’t study for your other classes, etc.
- Smiley: If you must be late or leave early on, a particular day please inform your professor in advance.

Evaluation and Make-up Policy:

The student is expected to participate in laboratory experiences as well as classroom experiences. There will be **no make-up labs**, so make sure to attend each week. Lab write ups are due during the class following the lab.

During the last 15 minutes of lab there will be a quiz. This quiz will consist of one problem similar to the homework. If you have done the suggested homework problems you should be able to do the quiz problem.

Three tests and a comprehensive final exam will also be given during the semester. The class grades will be based on:

<table>
<thead>
<tr>
<th>Grade Break Down</th>
<th>Percent</th>
<th>Course Grade</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab write-ups</td>
<td>10%</td>
<td>90 or above</td>
<td>A</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>3 Tests @ 17% each</td>
<td>51%</td>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>Lab Presentation</td>
<td>9%</td>
<td>Less than 60</td>
<td>F</td>
</tr>
</tbody>
</table>

Tests missed due to excused absences must be made up within five school days of the student’s return to class; otherwise a grade of zero will be assigned. It is the student’s responsibility to arrange with the instructor to makeup the missed work.

Hardship Withdrawal

A hardship W may only be sought after midterm in the case of a non-academic hardship such as severe, extended illness. The procedure for seeking a Hardship W is located on page 58 of the college catalog.
SGSC Douglas Campus Syllabus Access Statement

If you have a disability and require reasonable classroom accommodations, please see me after class or make an appointment during office hours. If you plan to request accommodations for a disability, please register with the Office of Disability Services in Room 118, Powell Hall, phone number 912-260-4435. Also, if you find that any content in this course is inaccessible because of your disability, please contact me as soon as possible.

SGSC Waycross Campus Syllabus Access Statement

If you have a disability and require reasonable classroom accommodations, please see me after class or make an appointment during office hours. If you plan to request accommodations for a disability, please register with the Office of Disability Services in Room 130, Dye Building, phone number 912-449-7593 or 912-260-4435. Also, if you find that any content in this course is inaccessible because of your disability, please contact me as soon as possible.

Non-Student Policy

It is campus policy that children and visitors may not be present in classrooms when in session or laboratories at any time.

Attendance Policy

Attending class regularly allows you to interact with instructors and other students in the learning process. Students are responsible for attending class and for the material presented in all classes. At the beginning of each semester, all instructors will inform students of policies regarding class absences. Instructors are responsible for counseling with students regarding the consequences of absences from classes or laboratories.

The following is the Attendance Policy as outlined in the Student Handbook:

1) Each division will establish attendance policies for each course.
2) Work may be made up in case of absences with legitimate excuses. Excuses may be judged legitimate by the instructor involved. If the instructor does not accept the student's excuse, the appeal procedure will be the same as the grade review procedure.
3) Group excuses for college sponsored activities from the Dean of Students will be considered legitimate excuses.
4) It will be necessary that the requirements for each course be distributed at the first meeting of the class.

To get the most from any course, each student should attend all the scheduled classes and laboratory periods. However, in cases where that is not possible the Division of Natural Science and mathematics has the following specific requirements:
1) A student will be assigned the grade of zero for any assigned work or exam missed because of an absence if the absence is not excused by the instructor.
2) A student will be given a grade of zero for any assigned work or exam missed because of an excused absence if the work missed is not made up.
3) The maximum number of class days that a student can miss and still receive credit for a class is twice the number of weekly meetings.
Student Learning Outcomes

1) Students will use reasoning and methods of inquiry to critically analyze data, solve problems, and explain natural phenomena.
2) Students will write clear, concise laboratory reports.

Lab Write Ups

Your lab write up should have the following layout:

1) YOUR NAME AND THE NAMES OF YOUR PARTNERS.
2) INTRODUCTION—a summary of what you did in the lab based on the handout (one page long).
3) DATA—use tables like the ones from the lab handout.
4) SAMPLE COMPUTATIONS—show all work so if a mistake was made I can help you find it.
5) GRAPHS—when called for they will be done on the computer.
6) CONCLUSIONS—a few well-chosen statements about conclusions warranted by the data, and how these compare with theory. Comparisons should be numerical, in terms of percent error whenever possible. The biggest sources of error should be discussed with ideas on how to minimize them (half a page).
7) ANSWERS TO QUESTIONS—if any are assigned

Laboratory Safety Policy

1) Never play in the lab.
2) Never eat, drink or smoke in the laboratory.
3) Avoid putting objects found in the laboratory into your mouth.
4) Do not perform unauthorized experiments.
5) Know location of safety equipment and learn how to use it properly.
6) Always make sure safety goggles are worn when performing experiments requiring them.
7) Avoid setting things on fire and keep your hair under control.
8) Keep sinks clean. Do not put solid materials into them. Waste baskets are for solids, sinks for liquids.
9) Always flush flammable liquids, acids, and alcalis down the sink with plenty of running water.
10) If you are injured, notify your instructor and or lab assistant immediately.
11) Make sure all gas, water and electrical appliances are cut off at your lab station when you finish your work.

SGSC Counseling Services Access Statement

Counseling Services are confidential and available upon request. If you would like to schedule a session, referral forms are located online or outside the counselor’s office. Please complete and submit the referral form to the counselor. Do not submit by email. Once you have submitted your form you will be contacted by phone to set up an appointment. The Counselor’s Office is located on the Douglas Campus in Powell Hall, Room 119, phone number 912.260.4438, or Waycross Campus in the Dye Building, Room 130, phone number 912.449.7593.

Library

Assignments may be included requiring students to make use of the resources provided in and through the Library. It may require general library orientation or subject discipline resource instruction presentations to classes.
Academic Support Center
Free peer tutoring is available to SGSC students currently enrolled in the course for which tutoring is requested. Students are encouraged to take advantage of this resource. Students visiting the Academic Support Center must sign in and sign out on the attendance computer every time they receive tutoring or utilize the center’s resources. Please ask the Desk assistant or an available staff member if assistance is needed. The Academic Support Center attempts to provide hours of operation that work around our students’ academic schedules. For more information, visit Academic Support Center.