SYLLABUS

Physics 101: Physics that Changed the World
Instructor: April Hendley
Spring 2015

I. TIME/PLACE: 2:00 p.m.-3:15 p.m. Tues. and Thurs. Neckers 440 (Lecture Hall).

II. CONTACT INFORMATION for Ms. Hendley

Office: Neckers 462
Phone: 618-453-2272
Email: ahendley@siu.edu
Office Hours: Tuesday: 3:30 pm - 4:30 pm
            Wednesday: 10:00 am - 12:00 noon
            Thursday: 3:30 pm - 4:30 pm
            Friday: 10:00 am - 12:00 noon
            Other times: By appointment.

III. REQUIRED RESOURCES


LAB MANUAL: Physics 101 Lab Manual, William Atkinson. This is available for Download (PDF) from SIU Online

SYLLABUS: This syllabus is available for download on SIU Online.

IV. COURSE OBJECTIVES:

Main Course Objectives:
- Learn about the fundamental laws and principles of Physics.
- Relate these ideas to the physical world around us and to the world of ideas in which we live.
- Understand how the scientific method operates.
- Develop familiarity with conducting simple experiments in the lab portion.

V. COURSE STRUCTURE

There are TWO lecture groups in this course.
Lecture 1 involves lab sections # 1, 2, 3, 4, and 5
Lecture 2 involves lab sections # 6, 7, 8, 9, and 10

NOTE: The lectures, exams, homework assignment due dates in the two lecture groups may not occur on the same days.

Lectures:

Lectures will normally be in PowerPoint Presentation format.
Expected behavior during lectures:
- It is not acceptable to talk, make noise or to otherwise disrupt the class, thus preventing other students from hearing the lecture.
- Cell phones should be turned off during lecture.
- Aside from not contributing much to your learning this course, it is very impolite to read the Daily Egyptian during class; please do not do it.
If you need to talk, use your cell or read the paper, please step out of the lecture hall as quietly as possible.

Laboratory:

There are a total of seven laboratories in this course.
The lab class meets in Neckers 116.
Of the seven labs, your highest six will count for the grade.
One lab, your lowest, is dropped.
Since we are dropping the lowest lab grade, there are NO MAKE UP LABS.

For the purpose of the laboratories the 101 students are divided into two groups:
Group 1 is constituted by sections 1, 2, 3, 4, 5, 6, 7, and 9.
Group 2 is constituted by sections 8 and 10.
The first week of classes there are no Laboratories.
The second week of the semester Group 1 (sections 1, 2, 3, 4, 5, 6, 7, and 9) will have their first lab.
The third week of the semester Group 2 (sections 8 and 10) will have their first lab.
From this point on, labs alternate every week. Each section has a lab every other week (except for the week of Spring Break).

Home Work:

Homework will be assigned roughly once a week. Homework will be collected in class.
Late homework are not accepted because the solutions will be posted shortly after the homework are due. Late homework will only be accepted for the documented reasons outlined in the Missed Exam and Late Homework Policy below.

Exams:

There will be four full class-long exams, which will be announced a week in advance, in class.
You will get to drop your lowest exam grade, hence there will be NO MAKE UP EXAMS, unless your absence from the exam is properly authorized (see Missed Exam and Late Homework Policy).

Missed Exam and Late Homework Policy

Valid reasons for missing an exam or turning in homework late are limited to properly documented:
- Religious Observance;
- Military Duty;
- Bereavement (only members of the immediate family);
- Official University business;
- Jury Duty or Court Appearance;
- Properly documented medical reason (Doctor’s certificate stating that the student was incapable of attending the exam or submitting the homework on time; notes from the Student Health Services that the student was there at the time are not sufficient).

It is the student’s responsibility to use the appropriate University form for Excused Absences to request accommodation from the instructor in the case of a late homework or missed exam. Except in cases of medical emergency, this University form needs to be given to the instructor before the absence occurs.

Final Exam:

The final exam is comprehensive.
**Final Exam will be on Tuesday May 12 from 2:45 p.m. to 4:45 p.m. in Neckers 440.**

VI. GRADES

Breakdown: Laboratories: 25%
            Homework: 17.5%
            Exams: 40%
            Final Exam: 17.5%

**TENTATIVE** Grade Scale: A: 85-100
            B: 75-84
            C: 65-74
            D: 51-64
            F: 0-50

VII. ACADEMIC DISHONESTY IN PHYS 101

This is to inform you of the policy regarding academic dishonesty in PHYS 101. Any individual found cheating on any exam, quiz, or assignment will be failed in the course. The possession of any cheat-sheet during the final will be considered cheating and treated as such. Plagiarizing will be considered cheating. If another individual takes the quiz or final for you, then both will be reported for cheating. A report will be made to the proper authority for further disciplinary action including possible suspension from the university.

VIII. EMERGENCY PROCEDURES

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on BERT's website at www.bert.siu.edu, Department of Safety's website www.dps.siu.edu (disaster drop down) and in Emergency Response Guideline pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.
**TENTATIVE SCHEDULE:** We will follow this schedule as closely as possible, but the dates for the topics, exams, and reviews are subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>Lab #/Lab Group</th>
<th>Lecture Dates</th>
<th>Lecture Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>No Lab</td>
<td>1/20</td>
<td>Astronomy</td>
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<td>1/22</td>
<td>Astronomy</td>
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<td>1/27</td>
<td>Astronomy</td>
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<td>1/29</td>
<td>Astronomy/Atoms</td>
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<tr>
<td>2</td>
<td>Lab 1 Group 1</td>
<td>2/3</td>
<td>Atoms</td>
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<td>2/5</td>
<td>Atoms</td>
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<td>3</td>
<td>Lab 1 Group 2</td>
<td>2/10</td>
<td>Atoms/Math/Units/Motion</td>
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<td>2/12</td>
<td>Review for Exam 1</td>
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<td>4</td>
<td>Lab 2 Group 1</td>
<td>2/17</td>
<td>Exam 1 Motion</td>
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<td>2/19</td>
<td>Exam 1 Motion</td>
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<td>5</td>
<td>Lab 2 Group 2</td>
<td>2/24</td>
<td>Motion/Forces</td>
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<td>2/26</td>
<td>Forces/Gravity</td>
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<td>Lab 3 Group 1</td>
<td>3/3</td>
<td>Gravity/Energy</td>
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<td>3/5</td>
<td>Energy</td>
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<td>7</td>
<td>Lab 3 Group 2</td>
<td>3/10</td>
<td>Spring Break</td>
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<td>3/12</td>
<td>Spring Break</td>
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<tr>
<td>8</td>
<td>No Lab</td>
<td>3/17</td>
<td>Review for Exam 2</td>
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<td>Lab 4 Group 1</td>
<td>3/19</td>
<td>Exam 2</td>
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<td>3/24</td>
<td>Thermo</td>
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<td>E&amp;M</td>
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<td>10</td>
<td>Lab 4 Group 2</td>
<td>3/31</td>
<td>E&amp;M/Waves</td>
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<td>4/2</td>
<td>Waves/Light/Matter</td>
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<td>11</td>
<td>Lab 5 Group 1</td>
<td>4/7</td>
<td>Light/Matter/Relativity</td>
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<td>4/9</td>
<td>Review for Exam 3</td>
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<td>Lab 5 Group 2</td>
<td>4/14</td>
<td>Exam 3</td>
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<td>4/16</td>
<td>Relativity/Quantum</td>
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<td>13</td>
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<td>4/21</td>
<td>Quantum</td>
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<td>4/23</td>
<td>Quantum/Nuclear</td>
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<td>Review for Exam 4</td>
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<td>Exam 4</td>
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<td>15</td>
<td>Lab 7 Group 1</td>
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<td>Nuclear</td>
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<td>5/7</td>
<td>Review for Final</td>
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IMPORTANCE DATES *
Semester Class Begins: ...........................................01/19/2015
Last day to add a class (without instructor permission): .........01/28/2015
Last day to withdraw completely and receive a 100% refund: ...02/01/2015
Last day to drop a course using SalukiNet: ....................04/05/2015
Last day to file diploma application (name to appear is Commencement program): ......................05/11/2015

FINAL EXAMINATIONS: .............................................5/11-5/15/2015
Note: For rules, exam dates, and test course by test date, visit Registrar's Academic Webpage at: http:// registrar.siu.edu

SPRING SEMESTER HOLIDAYS
Martin Luther King, Jr.'s Birthday 01/19/2015
Spring Break 03/09-03/13/2015

WITHDRAWAL POLICY -- Undergraduate only
Students who officially register for a session may not withdraw merely by the stopping of attendance. An official withdrawal form needs to be initialed by the student and forwarded to the University. For the proper procedures to follow when dropping courses and when withdrawing from the University, please visit http:// registrar.siu.edu/pdf/undergraduatecatalog114.pdf

INCOMPLETE POLICY -- Undergraduate only
An INC is assigned when, for reasons beyond the control, students engage in passing work are unable to complete all class assignments. An INC must be changed to a completed grade within one semester following the term in which the course was taken, or graduation, whichever occurs first. Should the student fail to complete the course within the time period designated, that is, by no later than the end of the semester following the term in which the course was taken, or graduation, whichever occurs first, the incomplete will be converted to a grade of F and the grade will be computed in the student's grade point average. For more information please visit: http:// registrar.siu.edu/graduate/incomplete.html

REPEAT POLICY
An undergraduate student may, for the purpose of raising a grade, enroll in a course for credit no more than two times (two total enrollments) unless otherwise noted in the course description. For students receiving a letter grade of A, B, C, or D, the course repetition must occur at Southern Illinois University Carbondale. Only the most recent (last) grade will be calculated in the overall GPA and count toward hours earned. See full policy at: http:// registrar.siu.edu/pdf/undergraduatecatalog114.pdf

GRADUATE POLICIES
Graduate policies often vary from Undergraduate policies. To view the applicable policies for graduate students, please visit: http:// registrar.siu.edu/graduate/graduatecatalog114.pdf

DISABILITY POLICY
Disability Support Services provides the required academic and programmatic support services to students with permanent and temporary disabilities. DSS provides centralized coordination and referral services. To utilize DSS services, students must come to the DSS to open cases. The process involves interviews, reviews of student-supplied documentation, and completion of Disability Accommodation Agreements. http:// disabilityservices.siu.edu/

PLAGIARISM CODE
http:// registrar.siu.edu/plagiarism

MORRIS LIBRARY HOURS
http:// registrar.siu.edu/morris

SAFETY AWARENESS FACTS AND EDUCATION
Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: http:// safety.siu.edu

SALUKI CARES
The purpose of Saluki Cares is to develop, facilitate, and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. For Information on Saluki Cares: 912-453-5174, or salukicares@siu.edu, http:// salukicares.siu.edu/index.html

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INCLUSIVE EXCELLENCE
SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well as an essential preparation for any career. For more information please visit: http:// www.inclusiveexcellence.siu.edu

LEARNING AND SUPPORT SERVICES
Help is within reach. Learning support services offers free tutoring on campus and math labs. To find more information please visit the Center for Learning and Support Services website:
Tutoring: http:// tutoring.siu.edu/
Math Labs: http:// tutoring.siu.edu/math_tutoring/index.html

WRITING CENTER
The Writing Center offers free tutoring sessions to all SIU students and faculty. To find a Center or Schedule an appointment please visit: http:// write.siu.edu/

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY
Our office's main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http:// diversity.siu.edu/

Additional Resources Available:
SALUKINET: https://salukinet.siu.edu
ADVISMENT: http:// advisement.siu.edu
SIU ONLINE: http://online.siu.edu/

Spring 2015 E.C. Rohrbeck