

## SYLLABUS PHYSICS 100 Undergraduate Seminar FALL 2013

**Wednesday 3:00pm – 3:50pm @  
Room 14B in the Applied Sciences building**

### **Class Supervisors:**

Professor Mark Byrd                      **Tel:** 618 453 2271                      **Email:** mbyrd@siu.edu  
Office Hours: MWF 10:30-11:30am and 1:50-2:50pm @ Neckers 477  
Professor Eric Chitambar                      **Tel:** 618 453 2020                      **Email:** echitambar@siu.edu  
Office Hours: TWR -2:00-4:00pm @ Neckers 480

**One-Credit Hour Class**  
**No Prerequisites**  
**PASS/FAIL grade**

This class provides an introduction to the Department of Physics and Physics Research at SIU. The class meets for one hour per week throughout the semester. Each week there is a presentation/discussion led by a Physics faculty, or a guest lecturer, about Physics and/or being a physicist.

There are no homeworks assigned to this class. Your final grade is based on your class attendance. To achieve a passing grade you **MUST** attend a **MINIMUM** of 12 out of 15 classes during the Fall semester.

### Outline of topics to be covered

<b>Week</b>	<b>Date</b>	<b>Topic</b>
1	Aug 21	Introduction to Physics: Introduction to Physics 100 What is Physics? Job prospects. Specializations. Professor Leo Silbert (Physics)
2	Aug 28	Introduction to Physics Research for Undergraduates
3	Sept 4	Special Topic 1: Overview of SIUC Physics and Magnetic Refrigeration Professor Naushad Ali (Physics)
4	Sept 11	Special Topic 2: Soft Physics and soft things around us Professor Leo Silbert (Physics)
5	Sept 18	Special Topic 3: Materials Science at SIU Professor Saikat Talapatra (Physics)
6	Sept 25	Special Topic 4: Teleportation and Quantum Information Professor Mark Byrd (Physics)
7	Oct 2	Special Topic 5: Guest Speaker 1
8	Oct 9	Special Topic 6: Guest Speaker 2

9	Oct 16	Special Topic 7: Computational Physics and Simulating Physical Problems Professor Thushari Jayasekera (Physics)
10	Oct 23	Special Topic 8: Applications of Adsorption Professor Aldo Migone (Physics)
11	Oct 30	Special Topic 9: Guest Speaker 3
12	Nov 6	Special Topic 10: Nano-Materials Professor Saikat Talapatra (Physics)
13	Nov 13	Special Topic 11: Surface Physics with Applications Professor Samir Aouadi (Physics)
14	Nov 20	<i>Thanksgiving Break</i>
15	Nov 27	Special Topic 12: Guest Speaker 4
16	Dec 4	Conclusions/Discussion: Evaluations/Survey

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](http://www.bert.siu.edu), Department of Safety's website [www.dps.siu.edu](http://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.