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

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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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| 1    | Aug 21 | Introduction to Physics: Introduction to Physics 100  
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  Thanksgiving Break

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