PHYSICS 514 – FALL 2009 Current Research Instruments

| Week # | | | |
|--------|------------------------|------------------------|-------------------------|
| Monday | Tuesday | Thursday | Homework |
| date | | V | |
| I | Vacuum I | Vacuum II | |
| 8/31 | (Metcalf) | (Metcalf) | |
| II | Vacuum III | Feedback and | |
| 9/7 | (Metcalf) | Control (Metcalf) | |
| III | Signals and Noise | Accelerators | |
| 9/14 | (Metcalf) | (Metcalf) | |
| IV | Our Tandem | Tour of Accelerator | Feedback & Control |
| 9/21 | (Metcalf and Lefferts) | (Lefferts) | papers due |
| V | NO CLASS | Mariachi | |
| 9/28 | Monday Schedule | (TBA) | |
| VI | Temperatures High | Liquefying Helium | Nuclear and accelerator |
| 10/5 | and Low (Metcalf) | (Graf) | papers due Tuesday |
| VII | Tour Helium Liquefier | Atomic Structure | |
| 10/12 | (Davis) | (Metcalf) | |
| VIII | Advanced Technology | Laser Teaching Center | Low temp |
| 10/19 | Lab (Davis) | (Noé) | papers due |
| IX | Optical Instruments | Stabilized and tunable | |
| 10/26 | & Lasers (Metcalf) | Lasers (Metcalf) | |
| X | Making a BEC | Ultrafast | |
| 11/2 | (Schneble) | (Weinacht) | |
| XI | Tour of | Introduction to | Lasers and Optical |
| 11/9 | Laser Labs | X-rays (Metcalf) | Instruments papers due |
| XII | Synchrotron | X-ray Microscopy | |
| 11/16 | Radiation (Metcalf) | (TBA) | |
| XIII | Neutrinos | Thanksgiving | |
| 11/23 | (TBA) | NO CLASS | |
| XIV | RHIC and PHENIX | The ATLAS detector | X-ray papers |
| 11/30 | (TBA) | (TBA | due |
| XV | Adaptive Optics | Coronagraphy | |
| 12/7 | (TBA) | (TBA) | |

(Required Statement)

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/