

# AST 347 - Undergrad Cosmology

Welcome to the home page for the course "Cosmology" (AST 347) in Fall 2015.

**Lecturer:** Neelima Sehgal

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**Class Times:** Monday, Wednesday, Friday 9:00 - 9:53am Room 181 ESS

**Office Hours:** Mondays 10:00 - 11:00am

**Course grade:** Homework Problem Sets (15%)  
Midterm Exam 1 (25%)  
Midterm Exam 2 (25%)  
Final Exam (35%)

**Course Text Book:** Introduction to Cosmology by Barbara Ryden, Addison Wesley, 2003

## Class Structure:

- Homework problem sets will be assigned on Mondays and are due the following Monday
- Midterm Exam 1 will be on Friday October 2nd
- Midterm Exam 2 will be on Friday November 6th
- The Final Exam will be on Wednesday December 9th
- We will aim to cover roughly one chapter of the textbook per week

## Topics to be Covered:

Fundamental Observations  
Intro to Spacetime Curvature  
Cosmic Dynamics  
Single-Component Universes  
Multi-Component Universes  
Measuring Cosmological Parameters

Dark Matter  
The Cosmic Microwave Background  
Nucleosynthesis and the Early Universe  
Inflation and the Very Early Universe  
The Formation of Structure

### **Americans with Disabilities Act:**

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

### **Academic Integrity:**

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. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. 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/>

### **Critical Incident Management:**

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.