

*ADVANCED TOPICS IN PHYSICS*

– *COSMOLOGY* –

**PHYSICS 472J - Syllabus**

Fall 2014

**Instructor :** Dr. Channon Price, REIC 120, x6106, [cprice@alaska.edu](mailto:cprice@alaska.edu)  
If you email me, include “PHYS 472J” in the subject line so that I can promptly read your message.

**Office hours :** MTWR 3:00pm-4:00pm or when available (consult my calendar on [google.alaska.edu](http://google.alaska.edu) under my email address.) You are encouraged to make an appointment (create an event on your [google.alaska](http://google.alaska) calendar and invite me to it.)

**Class hours :** MWF 1:00-2:00pm, REIC 207, from 9/15/2014 to 10/15/2014

**Prerequisites :** Physics 220 and Physics 301. Highly recommended: Physics 341, Physics 342, and (at least concurrently) Physics 343 and Physics 421.

**Text :** None. Readings will be assigned in class, and posted to the class website.

**Description:** We will discuss the historical and scientific importance of cosmology, its firm footing as a science, the present state of the observations that inform our view of cosmology, the current “benchmark” model of cosmology, and various open questions in cosmology. We will conclude with a discussion of the impact of the present science of cosmology on physics, and on scientific philosophy as a whole.

**Grading :** 1 credit. Homework (70%), attendance and notes (10%), and a final examination (20%) scheduled for Wednesday 10/15. See the course website for the homework assignments. Late homework will not be accepted, since solutions will be made available on the due date. You will be allowed to bring your class notes and homeworks to the final examination. The course will be graded on a curve, and will be graded plus/minus.

**Remarks :** One or two homework problems will be assigned essentially daily and due the following class meeting. The examination will cover the material assigned for the homework sets; a solution to the examination will be posted at the end of the examination. Even partial work is valuable; if you haven’t finished a problem, you should still submit your work – you will get partial credit. It is natural for students to work together. Please remember that your understanding of the material in this course will follow from the effort that you invest, and that it is against the UAF Honor Code to misrepresent work which is not your own; plagiarism on homework or on the exam will result in a failing grade. The course weight assigned to attendance and notes is in recognition of the value that you will add to this course by creating your own set of notes; I will not distribute notes or slides. Class participation, although not graded, is its own reward.

**Website :** The course website is located at <http://137.229.43.8/physics/phys472J.html>

**Disability Services :** The Physics Department will work with the Office of Disabilities Services (203 WHIT, x7043) to provide reasonable accomodation to students with disabilities.