

**The Ohio State University
Freshman Seminar Program
Course Proposal**

Course Information.

1. Attach a sample syllabus that includes the following. (Sample syllabi can be found at <http://freshmanseminars.osu.edu>).
 - the course goals
 - a brief description of the content
 - the distribution of meeting times
 - a weekly topical outline
 - a listing of assignments
 - grade assessment information (A-E or S / U)
 - required textbooks and / or reading list
 - the academic misconduct and disability services statements (sample statements can be found at <http://artsandsciences.osu.edu/currofc/resources.cfm>)

2. Attach a brief biographical paragraph that includes the current research interests, teaching awards and honors, and undergraduate courses taught by the participating instructor(s). The paragraph will be included in materials for first-year students.

Paul Sutter, Astronomy

Proposer's Name and Academic Unit



Proposer's Signature

sutter.84@osu.edu

Proposer's e-Mail Address

740.215.4279

Contact Phone Number

4/6/16

Submission Date



Signature Department Chair of Academic Unit

Please indicate the semester you would like to offer the seminar: AU' 16 SP' _____

This form and any attachments should be mailed to Freshman Seminar Program, 100 Denney Hall, 164 Annie and John Glenn Avenue, ATTN: Dawn Nolen or e-mailed to nolen.2@osu.edu. For additional information, please call 614/292-4680.

You are Here: Finding Our Place in the Universe

Arts & Sciences 1138, Freshman Seminar

Autumn Semester

1 Credit Hour

Day/Time TBD

Room TBD

Instruction: Paul M. Sutter, Ph.D.

Office PRB M2021

sutter.84@osu.edu

Office hours by appointment

Course Description

How big is the universe, and how does the Earth fit into it? How can we possibly comprehend such vast scales? Why is our modern conception of the cosmos so vastly different from the views we held in the past? How will our picture of the universe be different 30 years from now? In this course, students will have the opportunity to explore the biggest picture of all – the entire universe. Through online and in-class discussions, students will present, debate, and ponder the cosmos and how humans relate to it, and be guided through the scientific process as developed in the field of cosmology. Students will keep track of their thoughts throughout the semester, one class will be held in the OSU Planetarium, and the course will conclude with presentations.

Course Objectives:

- To introduce historical and contemporary views of the universe
- To explore how scientists uncover knowledge about the cosmos
- To put our daily lives in a cosmological context
- To learn how to follow logical paths of reasoning to jump from one conclusion to another
- To understand the scientific process

Texts

Weekly reading assignments will be drawn from several popular and scholarly online sources, including Space.com, the American Institute of Physics, NASA, and Universe Today

Required Activities

1. Students are expected to attend class and participate in the seminar discussions.

2. Each student is expected to read assignments prior to class, and have prepared 2-3 questions or discussion points. There will be very few lectures or presentations.
3. Students will maintain a journal, cataloging their questions during their reading and class discussions, identifying moments when their questions were answered, and listing follow-on questions.
4. Student presentations – 5 minutes discussing a question brought up but not satisfactorily answered in class; up to groups of 3 per presentation
5. There will be a discussion board on Carmen for out-of-class dialog.

Grading

Satisfactory/ Unsatisfactory

Class participation: 30%

Oral presentation: 20%

Journals: 30%

Online discussion: 20%

A mid-term review will be provided to give a picture of current participation status.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf).

Students with Disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

Weekly Schedule

Week 1 - Intro to Course – What Do You Know About the Universe?

Week 2 - Ancient Views of the Cosmos

Week 3 - The Sun at the Center

Week 4 - There's Lots of Stuff Out There
Week 5 - The Expanding Universe
Week 6 - The Size of the Universe
Week 7 - The Age of the Universe
Week 8 - Into the Darkness
Week 9 - Telescopes, Lasers, and other Gadgets
Week 10 - Robots Explore the Solar System
Week 11 - The Next 30 Years
Week 12 - Planetarium Show
Week 13 - Oral Presentations I
Week 14 - Oral Presentations II

Instructor Biographical Sketch

Paul Sutter is a Cosmological Researcher and Community Outreach Coordinator for the Astronomy Department, and the Chief Scientist at COSI Science Center. Paul received his PhD in Physics from the University of Illinois at Urbana-Champaign in 2011, and spent three years at the Paris Institute of Astrophysics, followed by a research fellowship in Trieste, Italy. His research focuses on many diverse topics, from the emptiest regions of the universe, to the earliest moments of the Big Bang, to the hunt for the first stars.

Paul is also the host of the popular "Ask a Spaceman!" podcast, where he answers questions posted on social media, and the YouTube series "Space in your Face". In addition, Paul writes for Space.com, regularly appears at events and in the media, and consults for film and TV productions.

During his graduate work at the University of Illinois, Paul received the Excellence in Teaching Award from 2005 to 2007, and assisted in teaching several courses, from *How Things Work* to *Quantum Physics*.