

An introduction to
ASTR 1000

Zach Meisel

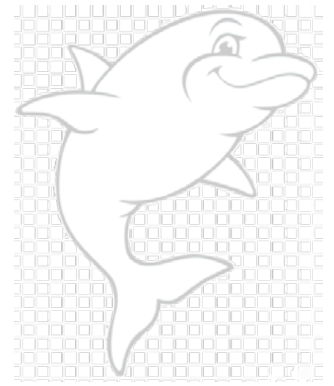
Ohio University - ASTR 1000 - Spring 2022

About Me

- *Me:* Zach Meisel
- *Positions at Ohio University:*
 - Associate Professor of Physics & Astronomy
 - Director of the Edwards Accelerator Laboratory
- *Academic History:*
 - 2006: HS at Vermilion, OH
 - 2010: BS in Astrophysics at Michigan State University
 - 2015: PhD in Physics at Michigan State University
 - 2015-2016: Postdoctoral research associate at University of Notre Dame
 - 2016: Joined Ohio University
- *Research Focus:* Nuclear Astrophysics
 - Stellar explosions
 - Origin of the chemical elements
 - Nature of ultradense matter
- Homepage: <https://inpp.ohio.edu/~meisel/>



Purpose of this course



- Most important: Learn cool stuff about outer space
- Understand how we know what we know about the universe
- Appreciate the distance and time scales of the universe
- Learn about the main objects of the universe, including their basic structure and evolution
- See how critical advances in science and technology have resulted from astronomical research

Mechanisms for achieving the course purpose

- You will watch the lectures associated with weekly homework assignments and complete the assigned reading (**Book:** *Astronomy from Open Stax*)
 - The number and length of lectures will be variable.
 - Lectures will generally be grouped by topic.
 - Lectures are only meant to supplement the book, so reading will still be essential.
 - Lectures will be posted at least a week before the associated assignment.
- You will complete homework assignments each week, which will be due by 11:59pm each Friday (*set a calendar reminder for yourself!*)
 - Homework assignments will be variable in length, so please start early.
 - Please contact me with any homework questions.
 - Starting the homework early is key to asking good questions early enough that I can provide useful help.
 - I recommend attempting the homework by Wednesday at the latest, so that we can correspond on Thursday and you can complete the last problems comfortably on Friday.

Course Content Location

- Webpage: https://inpp.ohio.edu/~meisel/ASTR1000/astr1000_home.html

Here you can find:

- Syllabus
- Course schedule, pointing to reading assignments and lectures
- Lectures in pdf, mp4, and youtube format (located on the **Schedule page**)

ASTR 1000 Overview Materials Academic Honesty Contact

ASTR 1000: Survey of Astronomy (Spring 2022)

This is a Fully Asynchronous Course (See course [schedule](#))
Instructor: Zach Meisel (email: meisel@ohio.edu)
Office Hours: Video call by appointment. Email anytime.
Midterm Exam: None
Final Exam: Homework to be completed the week of April 25th

Course Overview

The purpose of this course is to get an overview of major topics in astronomy. This class is fully asynchronous. This means there will be no scheduled lecture times. Students will be expected to watch the pre-recorded video lectures (links in the [schedule](#)) at their convenience, but prior to the deadline for the associated homework assignment. Similarly, regular readings will be assigned. The (free) course textbook is [Astronomy from OpenStax](#). An alternative download link and supplementary resources for students from OpenStax are available [here](#).

Homework will be weekly, due by 11:59pm on Friday, to be completed in TopHat. The TopHat course name is "ASTR 1000: Survey of Astronomy (Spring 2022)" and the Join Code is 556789.

Course information (other than homework), such as lectures and supplementary material will be posted here. Check back regularly throughout the semester. Relevant video lectures for a given homework assignment will always be posted at least one week before the homework assignment is due.

The course catalog description for ASTR 1000 can be accessed [here](#).

Course Materials

[Syllabus](#)

Course Schedule and Lectures (this is where the video lecture links and lecture slides are)

Homework:
The TopHat course name is "ASTR 1000: Survey of Astronomy (Spring 2022)" and the Join Code is 556789.

Textbook:
The open-access course textbook is [Astronomy from OpenStax](#). An html format and supplementary resources for students from OpenStax are available [here](#).

- Homework is on TopHat: <https://app.tophat.com/>
 - Course name: ASTR 1000: Survey of Astronomy (Spring 2022)
 - Join Code: 556789

Course Content Structure

- From large-scale to small, from far away to close:

<i>Week #</i>	<i>Week of ...</i>	<i>Topic</i>	<i>Book Chapters</i>	<i>HW deadline (11:59pm)</i>
1	Jan. 10	Overview of Astronomy	1	Jan. 14
2	Jan. 17	Radiation & Spectra	5	Jan. 21
3	Jan. 24	Telescopes	6	Jan. 28
4	Jan. 31	Big Bang & Cosmic Evolution	29	Feb. 4
5	Feb. 7	Milky Way Galaxy	25	Feb. 11
6	Feb. 14	Galaxies	26	Feb. 18
7	Feb. 21	Galaxy Evolution	28	Feb. 25
8	Feb. 28	Stellar Interiors	16	Mar. 4
9	Mar. 7	Spring Break	Spring Break	Spring Break
10	Mar. 14	Stars	17 & 18	Mar. 18
11	Mar. 21	Stellar Evolution	22 & 23	Mar. 25
12	Mar. 28	Star & Planet Formation	21	Apr. 1
13	Apr. 4	Our Solar System	7	Apr. 8
14	Apr. 11	Solar System Origins	14	Apr. 15
15	Apr. 18	Life in the Universe	30	Apr. 22
16	Apr. 25	All of the above	All of the above	Apr. 29

Tips for Success

- Read the book and watch the lectures *As Ronnie Coleman, 8x Mr. Olympia, would say: "Ain't nothing to it but to do it"*
- Set a calendar reminder to start your homework on Wednesdays
- Set a calendar reminder to complete your homework on Fridays
- Email me (meisel@ohio.edu) with any homework questions (or other course questions)
 - Use "ASTR1000" in the subject line
 - Let me know what you have tried or are confused about
 - After-hours emails are fine, but note that my response may be more delayed
- Let me know if extenuating circumstances will cause (or have caused) you to miss a homework deadline. Extensions may be possible.