People:
Prof. Rocky Kolb: Lectures
Rocky.Kolb@uchicago.edu; 773-702-0597; ERC 481 & 499
Assistant: Maureen Lowery; 773-834-5623; ERC 499

Dr. Brent Barker: Teaching Support Manager for Undergraduate Labs
bbarker@uchicago.edu; 773-702-8323; KPTC 314 & ERC 573

Dr. Julia Brazas: Director of Undergraduate Studies for Astronomy & Astrophysics
julia@uchicago.edu; 773-834-8401; ERC 599A

The Teaching Assistants:
Name                           email                        zoom rooms     Office hour¹
Mx. Jazmine Jefferson        jjefferson1111@uchicago.edu   see Lab Syllabus Friday 12pm
Ms. Samantha Usman           samanthausman@astro.uchicago.edu see Lab Syllabus Monday 10am
Mr. Jisheng Zhang            zhangjis@uchicago.edu        see Lab Syllabus Monday 7:30pm

Zoom:
The basic tool we will use for both lectures and labs will be Zoom. You should be familiar with zoom (if
not, request a Zoom Account here https://uchicagostudents.zoom.us/). If you are unfamiliar it would
be useful to consult the following two resources before the start of classes:
  Quick Start Guide:
  https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/0/236/files/2020/03/Zoom-quick-start-
             students.pdf
  Zoom Tutorials: https://its.uchicago.edu/zoom-video-tutorials/

We will also make heavier than normal use of Canvas.

Lectures:
Lectures will take place Tuesdays and Thursdays, 9:30am to 10:50am. The lectures will utilize Zoom. The
lectures will be recorded, so those of you who are in a time zone where synchronous viewing is not
possible, or have other computer issues, will be able to view the lecture at a more convenient time.
Because of class discussions, it is advisable to participate at the scheduled time if at all possible.

The Zoom room for lectures will be https://uchicago.zoom.us/j/2462422032.

Office Hours:
The office hours for Kolb are Tuesdays and Thursdays 11am -12pm. I will have a Zoom room open,
https://uchicago.zoom.us/j/2462422032, for office hours. If that period is problematic, please let me
know and I will try to accommodate a time convenient for you.

Office hours of TAs are given above. You may see any TA, not only the TA for your lab section. You may
also contact them for an appointment if you cannot be available at the scheduled times.

¹ All times listed here refer to Chicago time, the official time of The Big Bang.
Class Website:
All course material, including lectures, homework sets, homework solutions, etc., will be available on Canvas: http://canvas.uchicago.edu.

Textbook:
The textbook for the course is Perlov and Vilenkin, Cosmology for the Curious (freely available digitally from UChicago library). The text will not be heavily used.

Lecture Notes:
Powerpoint decks from all lectures will be available on the class Canvas website.

Homework:
Homework will be assigned every Tuesday, and due the following Tuesday at the beginning of class. Homework will be submitted online through Canvas in the Modules section, in PDF format.

While students are encouraged to study together and work on homework together, identical (or nearly-identical) copies of homework assignments are not acceptable and will be considered plagiarism, subject to the possibility of zero credit for the assignment, failing the course, and notification of the Dean of Students. You must list the people with whom you collaborated on homework assignments.

Late homework will not be accepted.

Homework solutions will be posted on Canvas after class on the Tuesday they are due.

Exams and Grading:
There will be one mid-term exam and one final exam. There will be no make-up exams. Grades will be based on

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>30%</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

If you do not take the mid-term, the final exam will count for 50% of the course grade.

Exams will be open book and notes.
Labs:
Lab information can be found on the Lab Syllabus. Please consult it. Labs will begin the second week of the term.

Lab Times:

<table>
<thead>
<tr>
<th>DAY</th>
<th>TIME</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>4:10 - 6:00pm</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Monday</td>
<td>8:50 - 10:40pm</td>
<td>Zhang</td>
</tr>
<tr>
<td>Tuesday</td>
<td>4:40 - 6:30pm</td>
<td>Zhang</td>
</tr>
<tr>
<td>Wednesday</td>
<td>11:30am - 1:20pm</td>
<td>Usman</td>
</tr>
<tr>
<td>Wednesday</td>
<td>6:30pm - 8:20pm</td>
<td>Jefferson</td>
</tr>
</tbody>
</table>

When you enroll in the lecture, the registration system assigns a lab time that is not in conflict with your other courses. For lab schedule issues, please contact Dr. Julia Brazas (contact information above).

Lab Syllabus:

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 11-15</td>
<td>No lab</td>
</tr>
<tr>
<td>Jan 19-25</td>
<td>Lab 1: Install-fest and Zoom Test - Flash, ImageJ, DS9</td>
</tr>
<tr>
<td>Jan 26 - Feb 1</td>
<td>Lab 2: Measuring distant objects with parallax</td>
</tr>
<tr>
<td>Feb 2-8</td>
<td>Lab 3: Measuring distance to a galaxy using globular clusters</td>
</tr>
<tr>
<td>Feb 9-15</td>
<td>Lab 4: Galactic distances and the Hubble diagram</td>
</tr>
<tr>
<td>Feb 16-22</td>
<td>Lab 5: Measuring the Cosmic Microwave Background</td>
</tr>
<tr>
<td>Feb 23 - Mar 1</td>
<td>Lab 6: The accelerating universe</td>
</tr>
<tr>
<td>Mar 2-8</td>
<td>No lab</td>
</tr>
<tr>
<td>Mar 9-12</td>
<td>No lab</td>
</tr>
<tr>
<td>Mar 16-19</td>
<td>No lab</td>
</tr>
</tbody>
</table>
Crisis-related absences and extensions:
This is an uncertain time for all of us. If you are impacted by events related to the COVID-19 pandemic, civic unrest, or other crises as they emerge, please reach out to us. We may be able to connect you to university resources, and the more you communicate to keep us updated, the easier it is for us to be flexible about course policies. We will all need to continue to adapt, and we are all in this together.

Accessibility
The University of Chicago is committed to ensuring equitable access to our academic programs and services. Students with disabilities who have been approved for the use of academic accommodations by Student Disability Services (SDS) and need a reasonable accommodation(s) to participate fully in this course should follow the procedures established by SDS for using accommodations. Timely notifications are required in order to ensure that your accommodations can be implemented. Please meet with me to discuss your access needs in this class after you have completed the SDS procedures for requesting accommodations. Phone: (773) 702-6000 Email: disabilities@uchicago.edu

Recording and Deletion Policies
The Recording and Deletion Policies for the current academic year can be found in the Student Manual under Petitions, Audio & Video Recording on Campus.
- Do not record, share, or disseminate any course sessions, videos, transcripts, audio, or chats.
- Do not share links for the course to those not currently enrolled.
- Any Zoom cloud recordings will be automatically deleted 90 days after the completion of the recording.