

Syllabus: Galactic, Extra-Galactic Astronomy & Cosmology PHYS 105A Sections 1 & 2 Spring 2019

	Section 1	Section 2
Instructor:	Prof. Phil Pinto (He/Him/His)	Prof. Gurtina Besla (She/Her/Hers)
Email:	pinto@email.arizona.edu	gbesla@email.arizona.edu
Office:	Steward Observatory 324	Steward Observatory N312
Office Hours:	After Section 1 & 2 class or by appt.	Tuesday 4:00-5:00 PM

TA (both sections): Elaheh Hayati (She/Her/Hers)
Email: ehayati@email.arizona.edu
Office Hours: Wednesday Parker Library, Steward Observatory (1-2:30)

Include PHYS 105A in the subject line of all emails

Class: **Section 1** Tuesday 2:00-3:50 PM. Steward Observatory Rm 208 Computer Lab
Section 2 Thursday 1:00-2:50 PM. Steward Observatory Rm 208 Computer Lab

Prerequisite: Calculus I - Math 122B or Math 125 or equivalent

Co-requisites: Mechanics - PHYS141 or PHYS161H

Textbook: A Student's Guide to PYTHON For Physical Modeling. (Updated Edition)
Jesse M Kinder, Philip Nelson
ISBN 978-0-691-18057-1

Course Goals:

- 1) Learn the Python programming language
- 2) Learn to use Jupyter Notebooks
- 3) Learn basic graphical techniques
- 4) Apply programming to physics problems
- 5) Walk away feeling confident in your abilities to code.

Evaluation:

Weekly Problem Sets. 90%
In Class Participation 10%

You will be required to submit assignments through D2L

Incomplete (I) or withdrawal (W) Grades: Requests must be made in accordance with University policies, which are available at:

<http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete>

<http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal>

Absence and Class Participation Policy: Lecture material and in class assignments are

essential to this course. **Attendance is required.** Students who miss class due to illness or emergency are required to bring documentation from their health-care provider or other relevant third parties. The UA policy concerning Class Attendance, Participation, and Administrative Drops is available at:

<http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:

<http://policy.arizona.edu/human-resources/religious-accommodation-policy>

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored.

<https://deanofstudents.arizona.edu/absences>

Classroom Behavior

- **Academic Integrity:** All students in this course are expected to abide by the University of Arizona's Code of Academic Integrity <http://dos.web.arizona.edu/uapolicies/>
- **Cheating is not tolerated in any form.** If a student is caught cheating on any assignment or presentation the penalty will be failure in the course. In all cases a letter will be sent to the Dean of Students describing the incident. If you are aware that someone else is cheating, it is your obligation to inform the instructor.
- We allow, even encourage, collaboration on assignments. However, **you must always write the final version of an assignment yourself**, and use your own words to describe what you have concluded. In particular, if we receive verbatim code from more than one person we will ask you to explain your answers in your own words.
- **Plagiarism is strictly prohibited.** If you are uncertain as to what constitutes plagiarism see: <http://deanofstudents.arizona.edu/codeofacademicintegrity>
- **Cell Phones:** The use of cell phones is not allowed in the class.
- **Attendance is mandatory.** In class attendance is required for this course.

ASSISTANCE

We are here to help you. so please take advantage of help sessions. We also want to get to know you, so you are very welcome to stop by to introduce yourself. Please contact us promptly if you have any questions or concerns regarding this class.

If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please register with **Disability Resources** (621-3268; drc.arizona.edu) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

The University of Arizona provides a wide variety of resources to help you feel more at home in the UA environment. Examples of student resource/cultural centers include:

African-American Student Affairs Center. <https://aasa.arizona.edu/>
Asian & Pacific American Student Affairs Center <https://apasa.arizona.edu/>
Guerrero Student Center <https://chsa.arizona.edu/>
Immigrant Student Resource Center <https://eao.arizona.edu/isrc>
LGBTQ+ Student Affairs Center <https://lgbtq.arizona.edu/>
Native American Student Affairs Center <https://nasa.arizona.edu/>
Transfer Student Center <https://transfer.arizona.edu/>
Veterans Education and Transition Services Center <https://vets.arizona.edu/>
Women & Gender Resource Center <https://wrc.arizona.edu/>

We encourage you to take advantage of the community, support, and learning opportunities afforded by these centers, and to encourage your friends and colleagues to do the same.