

INTRODUCTORY ASTROPHYSICS

PHYS 2315-001: Fall 2015

When: MW 5:30 – 6:50 PM

Where: Rm 205 SH

Instructor: Dr. Sangwook Park

Office: 332 Chemistry and Physics Bldg (CPB)

E-mail: s.park@uta.edu

Phone: 817-272-0994

URL: <https://www.uta.edu/profiles/sangwook-park>

Office Hours: Immediately after each class
or by appointment

Textbook: Lecture notes and slides
Supplementary hand-outs if needed

PREREQUISITES: PHYS 1444 General Technical Physics II
or instructor's permission

Objectives:

This course introduces basic astrophysics to science and engineering majors. Subject matter may include the solar system, stellar properties and evolution, the Milky Way Galaxy, and other galaxies.

Learning Outcomes:

Students will learn basic concepts of astronomy and astrophysics. Then, they will learn several main subjects of modern astronomy and astrophysics, including the properties of stars, interstellar medium, and galaxies.

POLICY: **3 Mid-Term Exams: 60 % of total grade (20 % each)**
Final Exam: 30 % of total grade (5:30-8:00 PM, Monday 12/14/2015)
6 Quizzes: 10% – Drop the lowest

Attendance is not required, but **strongly encouraged**.

Make-up quiz/midterm exam may be arranged **prior to** the regular one **depending** on circumstances. Make-up midterm after the regular exam may be arranged **only with official written proof for medical emergency**.

There will be **no make-up for the final exam – no exception**.

All electric devices must be **turned off** in class.

No food is allowed during class.

GRADE SCALE: 85 – 100% = A
 75 – 84 % = B
 65 – 74 % = C
 50 – 64 % = D
 0 – 49 % = F

- There will be **no curve**.
- **Clustering** will be considered for scores at border.
- Significant **improvement in the final exam** will be considered for those at border.

COURSE CONTENTS AND SCHEDULE (TENTATIVE):

General Introduction	-	Week 1
Astronomical Radiation	-	Week 2
Solar System Overview	-	Week 3
Stellar Properties	-	Week 3
Midterm Exam I	-	Week 4 (9/23)
Stellar Properties	-	Week 4,5
Stellar Interiors	-	Week 5,6
Interstellar Medium	-	Week 6,7
Midterm Exam II	-	Week 8 (10/21)
Stellar Evolution	-	Week 9,10
Wednesday, November 4 – Last Day to Drop		
Milky Way Galaxy	-	Week 10,11
Midterm Exam III	-	Week 12 (11/18)
	-	Week 13
Galaxies	-	Week 14
Course Review	-	Week 15
Final Exam	-	Week 16 (12/14)

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.

– Sangwook Park

University Drop Policy:

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Disability Accommodations:

UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

Title IX:

The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.

Academic Integrity:

Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which **may result in the student's suspension or expulsion from the University.**

Violations to the academic integrity policy will result in a significant downgrade of your course grade (including "F") and/or a report to the Office of Student Conduct.

Electronic Communication:

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey:

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week:

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures:

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Student Support Services:

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Syllabus on-line: <https://www.uta.edu/profiles/sangwook-park>
On this page click on “Teaching”.

<http://elearn.uta.edu/>

Lecture slides on-line (*Blackboard*): <http://elearn.uta.edu/> after each class.

Check announcements on *Blackboard* and your *E-mail* at least *once a day*. This is your responsibility!