SYLLABUS
Online Course:
ASTR 1346, SECTION …
(INTRODUCTORY ASTRONOMY II)
Stars and Galaxies

This syllabus provides a general plan for the course; if there are any deviations, you will be notified.

Instructor Information

Instructor(s):
Dr. Fajer Jaafari

Office Number:
120 H, Science Hall

Office Telephone Number:
Physics Dep Ph# 817-272-2266

Email Address: fajer@uta.edu

Use the mail option available on Canvas. I will be checking my e-mails until about 5 pm every working day and only occasionally in the evenings and over the weekends. I will try to get back to you within 24 hours).

Office Hours:
I should be available for your questions and concerns (as an office hour) every Tuesday and Thursday mornings from 11:00 am CT– 12:00 am CT.

Course Information

Section Information:
ASTR 1346, SECTION …

Time and Place of Class Meetings: Online course.

Note: The course will be available online all the time from the start of the semester through the end. You are not required to come on campus on any certain day or time for the lecture part of this course.

Description of Course Content:
This is a one semester lecture plus laboratory course on astronomy with an emphasis on the study of the Sun as a star, measurement of different properties of stars, birth, evolution and death of stars, strange states of matter (neutron stars and black holes), Milky Way Galaxy, study of the Universe beyond our Galaxy, formation and evolution of galaxies. As we consider more distant objects, such
as active galaxies and quasars, we move backwards in time, ultimately arriving at big Bang. The course finally takes you to the current cosmological ideas.

This course may be used to satisfy the UT Arlington core curriculum requirement in life and physical sciences.

**Student Learning Outcomes:**
On the completion of this course students should be able to

1. demonstrate the methods that astronomers use to obtain information about the Sun, stars and Galaxies,
2. discuss the properties of the Sun and list the layers of the Sun’s interior and atmosphere, sunspots and the effects of Sun activities on the Earth. Then
3. describe the nature and evolutionary paths of stars from birth to white dwarf, neutron stars, or black holes. Then
4. demonstrate the properties and evolution of our galaxy, other galaxies and the entire universe. Also,
5. analyze the various methods used to measure distances out to the edges of the visible universe.
6. Explain the experimental basis for the Big Bang theory of the universe. Then
7. discuss our place in the Universe. Finally,
8. discuss the possible existence of extra-terrestrial life in the universe.

**Prerequisites:**
While there are no formal prerequisites, a familiarity with high school mathematics is needed.

**Required Textbooks and Other Course Materials:**
*Text Book:* Astronomy Today: Author(s): Eric Chaisson and McMillan, Publisher: Pearson.

Below is the link of the text book:
Rental volumes are only $46 and digital copy of the whole book is only $39.

**Descriptions of major assignments and examinations:**

1. **Chapters Reading Quizzes on Canvas – 15% course grade**

There will be in all 13 quizzes from a total of 13 Chapters that are mentioned in the course syllabus. These quizzes are available on the Mastering Astronomy link. Each quiz will typically consist of 10 Multiple Choice Questions (MCQs). Quizzes will be timed but they should be finished before the due date for that particular chapter. All quizzes will be easy once you have read the book and slides thoroughly.
No credit will be given if responses to the quiz are given after the due date. Two with the lowest score will be dropped when counting its contribution to the final grade. Quizzes will contribute 15% towards the final grade in the course.

2. Discussions on Canvas – 20% course grade
The discussions are biweekly. There will be a total of about 7 discussion topics. To get the full credit for the discussion you must submit your own response and also reply to at least four other student's post. Students need to submit their original response for the discussion topic by the end (Sunday) of first week. This way other students will get sufficient time to read your post and respond accordingly the following week before the due date. The maximum point for each discussion is 10. Up to six points will be given for your own posting based on its quality, and 4 points for your critical and thoughtful comment to at least one posting.

Suggestions and tips: Your responses to other students must be well thought and researched that further enhances the quality of the on-going discussion and make others think critically. Just saying "me too", "I agree", "It's awesome", "I like it", "I never thought of it before" etc. is not enough for the grading point of view. You can supplement these phrases with more examples and ideas to get the credit. You can explain in scientific terms WHY do you agree or not agree with the other student's posting. It would be useful if you imagine that you are having a thoughtful conversation and critically discussing the topic with a person sitting next to you.

No credit will be given to responses posted after the deadline. The discussions contribute a total of 20% to the final grade.

3. Tests (Best 2 of 3) on Mastering Astronomy– 30 % course grade
A Total of 3 tests will be held in the course. These tests will be available on Canvas.
In calculating the contribution of tests towards the final grade, the best two out of three will be used. If you are not able to take a test for some reason, that will be your dropped test. Since I drop the lowest test grade, no makeup tests will be given. Tests contribute the highest percentage towards the final grade. This will show exactly what you are learning in the course.

Each test will be timed. You will have 50 minutes to record your responses for each test. Each test will have 50 Multiple Choice Questions (MCQs). All tests will be closed book. Once the test is started you have to complete it fully, you can’t leave it halfway and come back later. So, please make sure that you have suitable time and no other activities scheduled when you take the test. Also before taking the test, make sure your computer and internet connection are working properly. The test can only be taken once. The exact dates, timings etc. are mentioned in the "Schedule" section of the course. Mark your calendar in advance for the tests dates.

The coverage of the syllabus in each test is as follows,
Test 1 – Chapters 16, 17, 18
Test 2 – Chapters 19, 20, 21
Test 3 – Chapters 22, 23, 24

For each test, 50 questions will be distributed almost equally on all chapters listed above for that test. The two best scored tests from all three taken will contribute 30% to the final grade.

4. Final Exam - 15% course grade/ Final Exam – Comprehensive
You have to take the Final Exam on Canvas. The Final Exam will have a total of 100 multiple choice Questions to be answered. Out of the 100 questions, about 50 questions will be from chapters 25, 26, 27 and 28. The rest of the 50 questions will be from chapters 16 to 24.
The Final Exam will be timed. The final exam can only be taken once and it will be closed book. Once the exam is started you have to complete it fully, you can’t leave it halfway and come back later. So, please make sure that you have suitable time and no other activities scheduled when you
take the Final Exam. Also before taking the final exam, make sure your computer and internet
connection are working properly. The Final Exam will contribute 15% to the final grade.

**Important Note:** The tests and the final are closed book exams. In addition, you will be required to
use the Respondus Lockdown Browser to take the tests (with Camera). I will send more information
about it as we get closer to Test 1.

5. **Lab Work – 20% course grade**
As this is a lab science course, if you **do not obtain a passing grade (60%)** in your lab, you
**Cannot** pass the course, you will be given an “I” means incomplete. regardless of how well you do on the
lecture part of the course.
Lab is also online (except may be a couple of on-campus visits). You need to register separately in
the Astronomy online lab (**ASTR1346**). Your lab instructor will provide me your lab grades at the end
of the semester. Lab grades will contribute 20% to the final grade.
If you get an “I” or did not pass the lab part, you just need to contact the lab coordinator to retake
the missing labs (within the next semester). You don’t have to re-enroll in the lab or pay any
money to retake/redo the missing labs/experiments.

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**Grading Information**

**Grading:**
The grading scale would be as follows.
90-100: A
80-89: B
70-79: C
60-69: D
Less than 60: F (Fail)

**Exams and Grading**

<table>
<thead>
<tr>
<th>Course Element</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1. Chapters’ Quizzes on Canvas</td>
<td>15 %</td>
</tr>
<tr>
<td>2. Biweekly Discussions on Canvas</td>
<td>20 %</td>
</tr>
<tr>
<td>3. Tests (best 2 of 3) on Canvas</td>
<td>30 %</td>
</tr>
<tr>
<td>4. Final Exam on Canvas</td>
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</tr>
<tr>
<td>5. Lab Work on Canvas</td>
<td>20 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
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</tbody>
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**Make-up Exams:**
Just in case if you have an excused absent from completing any assignment, you need to contact me to
arrange for another time for you to take.

**Expectations for Out-of-Class Study:**
Beyond the time required to attend each class meeting, students enrolled in this course should expect to
spend at least an additional **9 hours** per week of their own time in course-related activities, including
reading required materials, completing assignments, preparing for exams, etc.

**Grade Grievances:**
Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog

**Institution Information**

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the [Institutional Information](http://www.uta.edu/provost/administrative-forms/course-syllabus/index.php) page which includes the following policies among others:

- **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://wweb.uta.edu/aao/fao/](http://wweb.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). Only those students who have officially documented a need for an accommodation will have their request honored. 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) [http://www.uta.edu/disability/](http://www.uta.edu/disability/) or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability). [Counseling and Psychological Services (CAPS)](http://www.uta.edu/caps/) is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

- **Non-Discrimination Policy**: 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](http://uta.edu/eos).

- **Title IX Policy**
  The University of Texas at Arlington (“University”) is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. For
information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Michelle Willbanks, Title IX Coordinator at (817) 272-4585 or titleix@uta.edu

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 in their courses by having students acknowledge the honor code as Pof 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. Additional information is available at https://www.uta.edu/conduct/. Faculty are encouraged to discuss plagiarism and share the following library tutorials http://libguides.uta.edu/copyright/plagiarism and http://library.uta.edu/plagiarism/

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.

Campus Carry: Effective Janus 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

- Student Feedback Survey
At the end of each term, students enrolled in face-to-face and online classes categorized as “lecture,” “seminar,” or “laboratory” are 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 via the SFS database is aggregated with that of other students enrolled in the course. Students’ anonymity will be protected to the extent that the law allows. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit http://www.uta.edu/sfs.

- Final Exam Schedule
for semester-long courses, 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.

- **Netiquettes (stands for Net or Online Etiquettes)**
  At UT Arlington we emphasize and try to maintain the highest ethical standards in personal and professional communication. Treat your online class the same way you would the face-to-face class. Written yelling, shouting or demeaning of classmates’ postings and ideas will NOT be tolerated. Try to be polite when communicating with the instructor or the classmates. Use of racial or ethnic slurs, flaming, or derogatory statements are grounds for disciplinary actions.

- **Academic Dishonesty/ Plagiarism**
  Even though this is an online course, you are just as bound to the university’s academic dishonesty policy as the students in face-to-face on-campus courses.
  It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.
  "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, POne, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22).

- **E-Culture Policy**
  The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

  All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington.
  Students are responsible for checking their email regularly.

### Additional Information

**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/studentsuccess/success-programs/programs/resource-hotline.php](http://www.uta.edu/studentsuccess/success-programs/programs/resource-hotline.php)

**IDEAS Center:**
(2nd Floor of Central Library) offers **FREE** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in, or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593. [The IDEAS Center](https://www.uta.edu/ideas/) (2nd Floor of Central Library) offers **FREE** tutoring and **mentoring** to all...
students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.

**The English Writing Center (411LIBR):**
The Writing Center offers **FREE** tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at https://uta.mywconline.com. Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

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**Emergency Phone Numbers**

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<thead>
<tr>
<th>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</th>
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**Active Shooter:** The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by UTA Police regarding the options and strategies we can all use to stay safe during difficult situations. https://police.uta.edu/activeshooter

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**Library Information**

The Library’s 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library’s hours of operation. http://library.uta.edu/academic-plaza

**Research or General Library Help**

Ask for Help
- Academic Plaza Consultation Services (library.uta.edu/academic-plaza)
- Ask Us (ask.uta.edu/)
- Research Coaches (http://libguides.uta.edu/researchcoach)

Resources
- Library Tutorials (library.uta.edu/how-to)
- Subject and Course Research Guides (libguides.uta.edu)
- Librarians by Subject (library.uta.edu/subject-librarians)
- A to Z List of Library Databases (libguides.uta.edu/az.php)
- Course Reserves (https://uta.summon.serialssolutions.com/#!/course_reserves)
- Study Room Reservations (openroom.uta.edu/)

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RESOURCES FOR STUDENTS:

LIBRARY library.uta.edu

Research or General Library Help

Academic Plaza Consultation Services library.uta.edu/academic-plaza

Ask Us ask.uta.edu/

Library Tutorials library.uta.edu/how-to

Subject and Course Research Guides libguides.uta.edu

Librarians by Subject library.uta.edu/subject-librarians

Research Coaches http://libguides.uta.edu/researchcoach

Resources

A to Z List of Library Databases libguides.uta.edu/az.php

Course Reserves pulse.uta.edu/vwebv/enterCourseReserve.do

Study Room Reservations openroom.uta.edu/