

ASTR 1303 01W – Stars and The Universe Online COURSE SYLLABUS: Fall 2019

WHO I AM

Instructor: Jeff Wilson, Adjunct Faculty Office Location: None - Off campus Office Phone: None Virtual Office Hours: Upon Request, YouSeeU-Virtual Classroom in D2L, currently on Wed, 9p-10p.

University Email Address: jeffrey.wilson@tamuc.edu Please include "ASTR Online" in the subject line.

Preferred Form of Communication: Email

SUMMARY OF IMPORTANT INFO

- 1) Links to all youtube information are available in myLeo (aka D2L Brightspace). However, if necessary, you can access the videos here: https://www.youtube.com/playlist?list=PLWP4siBWa8jhJK7QvX0ULC5jTte61BbxU
- 2) If the information in the syllabus differs from the syllabus, the syllabus overrides the video information.
- 3) The required textbook is 21st Century Astronomy 6th edition with Smartwork. See below for details.
- 4) Any work turned in via email that has multiple pages must be as a single attachment.

Important disclaimer: This course reuses department-created videos and content. Many dates are repeated in multiple locations and it's difficult to catch them all. If you come across anything that is confusing, unclear, or inconsistent please notify me immediately by email so I can either fix it or notify the class of the issue. **Speak up!** Any date discrepancies are superseded by dates in the syllabus.

WHAT THIS COURSE IS ABOUT

Course Description:

Astronomy is an ancient science with records dating back to the dawn of civilization. Despite this long history, it remains an exciting and vibrant area of ongoing study. In the coming years, astronomers may discover Earth-sized planets around other stars, see the first stars emerging from the cosmic dawn, and explore new physics in realms and laboratories that Earth-bound scientists can only dream of.

In this course, we will focus on studying stars and galaxies, as well as the natural laws and tools that astronomers use to study these distant objects. We'll begin by studying gravity, light, and

telescopes. We'll then study the Sun as an example star and use it as a stepping stone to reach ever further into the Universe. Along the way we'll discover new worlds around other stars, peer into the hearts of black holes, witness collisions of galaxies, and piece together vital clues pointing to the origins of the Universe.

One big topic we will not cover is our own Solar System. If you want to know details about the eight planets, their moons, asteroids, meteors, and comets, you'll need to take ASTR 1304.

Student Learning Outcomes:

- 1. You will be able to explain the characteristics of stars and their life cycles.
- 2. You will be able to identify the classes of galaxies and their basic properties.
- 3. You will be able to state evidence supporting astronomers' explanations of the origin and fate of the Universe.
- 4. You will be able to evaluate statements about astronomy using the scientific method.
- 5. You will be able to identify constellations, stars, and deep-sky objects visible from Texas.

WHAT YOU ABSOLUTELY NEED

Materials – Textbooks, scientific calculator.

Required:

- 21st Century Astronomy by Kay, Palin & Blumenthal, 6th Edition, + Smartwork5 access. Publisher: WW Norton
- A computer (PC or Mac) on which you can access the internet and install software
- Access to a scanner or other means of turning in some written work and sketches.

How to Save Money

The TAMUC Bookstore is selling new editions of the book in hardcover or a cheaper version in looseleaf. Used or rental versions of the book are available from the bookstore or elsewhere on the web.

IMPORTANT: Used books and rentals often do not come with access to SmartWork, while new versions come with complimentary access. You can purchase SmartWork access from https://digital.wwnorton.com/astro6.

Choose your textbook option carefully: The total cost of book + SmartWork may be cheaper if you get a new textbook. Buying a used textbook will require the SmartWork be purchased separately, so the combined cost may be more. If you use an older version of the text, it will be your responsibility to reconcile chapter, section, and/or page number differences from what I post in assignments or schedules. Also, you must ensure that any SmartWork access is for the latest version.

Preferred format: eBook + Smartwork5: 978-0-393-67548-1 \$70.00 Alternative formats: Paperback + Smartwork5: 978-0-393-67550-4 \$122.00 Looseleaf + Smartwork5: 978-0-393-67556-6 \$85.40

Course Prerequisites:

None, though you should be comfortable with basic algebra.

SmartWork Access Information

Homework and Reading Quizzes must be completed using SmartWork. You are required to purchase a subscription to this site; a registration code for a 365-day subscription comes

included with any new textbook available through the bookstore, or it can be purchased separately. The registration code is provided either with your text or from the publisher. It is unique to you, not the course. I cannot provide the registration code for you.

Note: Our course Enrollment Key in SmartWork is **159530** for course **Fall 2019-Stars & Universe)**. You should not need this code! If you use the links provided in myLeo, the key and course are set up for you. If you access Smartwork directly through the publisher website, you will need the code, but this is *not recommended* and will result in lengthy delays in getting your grades updated in myLeo. SmartWork has support available at: <u>https://digital.wwnorton.com/astro6.</u>

How This Course Is Organized

This course will be organized by units. Most units will last just one week, but some units will cover multiple weeks. Some units cover one chapter in the text, some cover multiple chapters. You should check the course page often to see what activities and assignments are due during the week.

What Should You Do First?

After reading this syllabus, you should proceed to the course page on LearningStudio, watch the introductory video on the course homepage, and then proceed to Unit 1: Introductions. Complete the activities and assignments listed under Unit 1. Due dates are specified on D2L (myLeo).

How Should You Proceed For Each Unit?

- 1. All activities and assignments for a unit will be listed on the unit's main page on LearningStudio. The unit home pages are found in the left navigation bar of LearningStudio. A course announcement will be made when each unit is available.
- 2. Each unit will have a short introductory video explaining the assignments for that unit.
- 3. You should complete any reading assignments and reading quizzes first (note the reading quizes are not for grades).
- 4. After completing reading quizzes, you may listen to any online minilectures listed within the unit and complete the associated response questions.
- 5. Complete any other listed activities and assignments given in the weekly unit.
- 6. If there is a Stellarium activity under the unit, be sure to complete it by the deadline.
- 7. Even after completing the unit, you may want to check for any new content (such as new minilectures or external links) that I may post in order to clear up any confusing topics.
- 8. No new assignments will be posted in a unit after the announcement that the unit is available.

Being a Successful Student

I *strongly* encourage you to check out the following resources to see if you are likely to succeed in an online course. This course will require just as much work as a face-to-face course. If you are uncertain, you are always welcome to switch sections to join our brick-and-mortar version of Astr 1303 (see the Schedule of Classes for meeting times and course numbers).

- <u>What Makes a Successful Online Student?</u>[†]
- <u>Self-Evaluation for Potential Online Students</u>⁺

HOW THE COURSE WILL WORK

Instructional Methods / Activities / Assessments

Course pace

While I realize that some online students prefer to complete a course as fast as possible and others like to wait several weeks and then do as much work as possible, <u>these methods won't work with</u> <u>this course</u>. Student interaction is a crucial part of learning, and we can't interact if no two students are on the same part of the course.

The course is broken up into 12 units. *The onus is on you to keep up with deadlines through myLeo*. MyLeo has a Course Checklist tool to help you keep track of what you have and have not completed. If you go to the Course Home page and click on "Course Checklist" at the bottom you can access this tool.

Participation

Because this course is an online course, participation options are limited. However, if the need arises, we may use threaded discussions or live meetings on D2L Brightspace. These will not be required but may help you to ask questions in an interactive manner. If email threads get too long, I may elect to move discussions to this forum.

SmartWork: Reading Quizzes and Homework

SmartWork is an online astronomy homework and tutoring tool. Its advantages are that SmartWork will give you instant feedback on whether you got a question right or wrong and provide you with hints and tools to better learn the material.

I suggest the following strategy for learning the information: Skim the chapter in the text, looking at pictures, unit titles, and word definitions. At the end of the chapter is a brief chapter summary you should also read over. On occasion, I may post minilectures, that cover content not covered well in the textbook. Finally, re-read the chapter, in more depth this time.

Homework assignments will be assigned for each unit. These are intended to be the "capstone" of the unit; i.e. they should usually be the last thing you do in a unit. If you do the homework and find you still don't understand something, you definitely want to ask me about that topic in office hours or by email.

Turning in Work

If you have a need to turn in any work to me, **it must be in a single file**. You have many options at your disposal to do this. You can copy all pages into a single doc or pdf file. You can take photos and add to doc or pdf files. You can also use the tool CamScanner, a free tool to help convert digital copies. Do whatever works best for you, but make sure I only get a single file per assignment. Note that if multiple assignments are due, you can turn in 1 file per exercise.

Also, note that there are relatively few assignments. Getting a "0" on any assignment will have a dramatic impact on your grade!

SmartWork Grading Policy

The grading policy for each SmartWork assignment are shown in each assignment. Late homeworks are penalized 10% per day. After 7 days, you will earn 0 points. The final assignment, however, must be turned in by the due date. No late work will be accepted since it is end of semester.

The following are considered cheating and will not be tolerated: Directly copying text from a website or other printed source, obtaining copies of solutions to homework questions (whether from past students or other sources), directly copying another student's work, etc. See the section on "Academic Integrity" below for full details.

Mini-Lectures and Response Questions

Within each unit, I will upload mini-lectures that you will be able to view. These videos are approximately 15 minutes each and will focus on one or two important points each.

Each video will be paired with a minilecture response activity on LearningStudio. The responses contain a few thought questions that allow you to check your learning to see if you understood the material and thought processes covered in the mini-lecture. These are an opportunity for you to begin to think about and work with the concepts before they show up on homework or exams without the pressure of getting a right or wrong answer. Some questions will be easy, some hard, and some will require you to put together more than one concept in order to figure out an answer.

The minilecture responses are not graded but allow you to check your learning in a no-pressure environment. Correct answers and brief explanations for the answers should be visible after you complete the response questions.

There will be material covered in the reading that I will not cover in minilectures but yet will expect you to know. If a topic is not covered in a minilecture but appears on a reading quiz and/or homework, it may well appear again.

Exams:

Three online exams will be given during the semester through D2L Brightspace: the first after Unit 5: Telescopes, the second after Unit 9: Star Death, and the third at the end of the term. For the exams you may use whatever materials you like (text, homework solutions, internet searches, etc). However, the exams are *timed* and may only be taken once, so you will want to study the material well before taking the exam. The exams are not officially cumulative, but astronomy is a very intertwined science and topics covered on exam one will be required knowledge to answer questions on exam three.

Labs:

Astronomy labs are a separate class (Astr 1103); you do not need to be enrolled in a laboratory section to earn credit in this course. You should speak with your academic advisor to determine if signing up for a lab section is right for your degree plan. You can take the lab courses in future semesters; they do not need to be taken concurrently. At present, we do not offer online labs for astronomy.

Extra Credit: Observatory Visit, Science Museum Visit, or a Planetarium Show:

If you live close to Commerce, you will have the opportunity for an optional visit to the Commerce Observatory (about 5 miles south of Commerce). If you attend, simply write up what you learned/observed and have the leader sign and date your paper to prove you attended.

You can also earn extra credit by attending a planetarium show. The A&M-Commerce Planetarium also exhibits several different shows every Friday night at 7pm and 8pm. Tickets are \$4 for

children and students with student ID, \$4.50 for senior citizens, and \$5 for adults. Go to http://www.tamuc.edu/planetarium/ for a current listing of shows. If you attend a show, tell the staff that you are a member of this class. They will make a note that you attended. Then email me two paragraphs: one summarizing the show, and a second telling me something specific about the show that you found interesting and why. If and only if you complete both of these steps, you will get extra credit.

If you are not near Commerce or cannot make it to these opportunities, you can visit a sciencethemed museum and send me a copy of your ticket stub and a short paragraph describing an interesting exhibit you saw at the museum.

You may also do observing exercises. There is a list of extra credit viewing exercises listed in a document called 'Observing Projects.doc' stored in the Doc Sharing folder on D2L Brightspace. Most will require at least minimal observations so you will need clear skies. Don't wait until the last days and expect clear skies – start early!

Extra Credit Terms, Conditions, and Caveats:

You may only earn extra credit once, though you are welcome to attend as many of the observatory and planetarium events as you like. All extra credit work must be turned in on or before the last day of class. Family of any age is welcome to the planetarium shows; be sure to check on the ageappropriateness of shows (all are fine for all audiences, but some are aimed at children and some at adults). You will receive 1 point of credit added to your final grade for each extra credit attempt (up to a maximum of 5 pts). Observing exercises may be up to 2-points apiece depending on which one you attempt (ask beforehand if you want to know the weight for an exercise).

All extra credits are to be turned in to me via email.

Grading

Grading will be done on an absolute scale with no competition. If you all earn an A, you all get an A. I may "curve" grades for specific assignments and/or final course grades at my discretion, but your percentage earned will never go down if I apply such a curve. Your current grades will be available through the gradebook on D2L Brightspace. Note that the gradebook on SmartWork is <u>not</u> official.

I will entertain other ideas for extra credit, but I reserve the right to limit you to the extra credit described on the previous page.

Grading is weighted by assignment using the following weights:

Assignment Type	Weighting
Homework Assignments	25%
Exam 1	25%
Exam 2	25%
Exam 3	25%

The grading scale is:

90% to 100%	А
80% to 89.9%	В
70% to 79.9%	С

60% to 69.9%	D
Below 60%	F

TECHNOLOGY YOU WILL NEED

This course is a fully online course. You need to be comfortable with basic computing skills and web browsing, and to be able to learn to use the various tools on LearningStudio even if you are not familiar with them yet.

To fully participate in online courses you will need to use a current Flash enabled browser. For PC users, the suggested browser is Google Chrome or Mozilla Firefox. For Mac users, the most current update of Firefox is suggested.

You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:

- 512 MB of RAM, 1 GB or more preferred
- Broadband connection required courses are heavily video intensive
- Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

You must have a:

- Sound card, which is usually integrated into your desktop or laptop computer
- Speakers or headphones.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u>[†] <u>http://www.java.com/en/download/manual.jsp</u>[†]
- Current anti-virus software must be installed and kept up to date.
- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - o Adobe Reader⁺ https://get.adobe.com/reader/⁺
 - o Adobe Flash Player⁺ (version 17 or later) https://get.adobe.com/flashplayer/⁺
 - o <u>Adobe Shockwave Player</u>[†] <u>https://get.adobe.com/shockwave/</u>[†]
 - o <u>Apple Quick Time</u>[†] <u>http://www.apple.com/quicktime/download/</u>[†]

At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

For this course in particular, you will need the following software and subscriptions:

- Access to a scanner or other way of making digital copies of handwritten materials.
 - I prefer PDF files to images

• Scanners work best

• Many students have used the app CamScanner (the free basic version is sufficient) with their camera phone.

• SmartWork – the web-based astronomy homework system at https://digital.wwnorton.com/astro6⁺. See *What You Absolutely Need* for details on how to purchase a subscription.

D2L Brightspace (myLeo) Access and Log in Information

This course will be facilitated using D2L Brightspace, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to <u>myLeo</u>[†]. <u>http://www.tamuc.edu/myleo.aspx</u>[†]

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or <u>helpdesk@tamuc.edu</u>[†].

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login to myLeo, click on the "My Courses" tab, and then select the "Browser Test" link under Support Services.

HELP!!!!!

Are you lost, confused, or worried?

First, DON'T PANIC!

Next, step back and try and pinpoint the source of your confusion:

- Have you read the textbook sections? If not, go read them! If you have, maybe you need to try different reading methods. Science textbooks are not like novels; they present information in a completely different method than most reading material, and there is no plot thread unfolding as you get further into a chapter. Here are some websites with suggestions on how to read science textbooks:
 - How to Read Effectively in the Sciences: http://academic.cuesta.edu/acasupp/AS/621.htm
 - Reading Assignments in Science: <u>http://www.studygs.net/science/readingtexts.htm</u>
 - The SQ4R Method for Reading: <u>http://scs.tamu.edu/?g=node/105</u>
- Have you watched the minilectures? These are designed to go over the main points where I think you might struggle with concepts.
- Do you just need some time away? Astronomy is too much to deal with all at once.
 - DO NOT try to do all the assignments in one sitting -- work on the assignment over a couple days and give your brain some time to absorb and mull over the information.
 - Except for the reading quizzes and exams, all activities are untimed. You can start your homework on SmartWork, go away a several hours days, and pick up where you left off, and not lose any points.
- Review the How To Get Started section above, and focus on how to be a successful student and how to proceed in each unit.
- If after all of this you are still confused or uncertain, it's time to seek help. Don't wait until the exam! Here you have many options:

- Talk to your classmates! Use the student lounge or email to solicit help.
- Attend my office hours (see next section). You can come to real or virtual hours, or make an appointment with me if none of those times work.
- If you are still stuck, contact the Academic Success Center to search for other options that may help you. <u>http://www.tamuc.edu/studentLife/campusServices/academicSuccessCenter/</u>

Are you experiencing technical difficulties?

If your problems are with D2L Brightspace:

Texas A&M University-Commerce provides students technical support in the use of D2L Brighspace. The student help desk may be reached by the following means 24 hours a day, seven days a week.

- **Chat Support:** Click on *'Live Support'* on the tool bar within your course to chat with a D2L Brighspace Representative.
- **Phone:** 1-866-656-5511 (Toll Free) to speak with D2L Brighspace Technical Support Representative.
- **Email:** <u>helpdesk@online.tamuc.org</u> to initiate a support request with D2L Brighspace Technical Support Representative.
- **Help:** Click on the '*Help*' menu item under the "More" item on the toolbar for information regarding working with D2L Brightspace.
- **Please don't contact me** for D2L Brightspace problems. I'll just tell you to take the above steps.

If your problems are with SmartWork:

- If you are having trouble joining the class, see the "Joining SmartWork" link in the D2L Brightspace menu bar and the links on that page.
 - The most common problems are that you are confusing your registration code, which comes with your book or your online purchase, and the enrollment key, which is listed under How To Get Started above.
- If you are having other problems, go to the SmartWork student support page at http://books.wwnorton.com/books/buysmartwork.

HOW TO CONTACT ME AND STAY CONNECTED

Interaction with Instructor

Email: I can be reached by email at <u>jeffrey.wilson@tamuc.edu</u>. It may take me up to 24 hours to send you a response (48 hours on the weekend or holidays), but most often I will get back with you within the hour. If you don't hear back from me in 24 hours, please send another email. I assume you check your campus email daily, so if I send out a class email, I'll assume you read it.

Office Hours: Office hours are virtual. My default time is Wed 8pm-9pm, but I will make made a survey available on D2L Brightspace to change the day/time if necessary. If you cannot make that time, I can be available upon request. My contact will be through Adobe connect, though other tools may be used if necessary (such as google classroom or hangouts). Office hours are times that I set aside when I promise to be available so that you can contact me with any questions about the course real time. During office hours, you can ask questions about the course material, ask about homework, see your current grade, or ask other questions

about the class or astronomy in general.

Office hours work best if you have your textbooks, class notes, and homework sets with you.

If you want to talk but cannot come during office hours, please contact me by email in order to set up an individual appointment. By setting an appointment, you both guarantee that I will be in my office (or online) and that I will have plenty of time to talk with you.

Facebook: Please don't try to friend me on Facebook or other social networking sites while taking this class. I prefer not to spam you with cat videos, and you won't have to worry about me trolling you.

Netiquette

I expect all students to behave to basic standards of etiquette on the web (and in real life). Abusive or inappropriate comments will be removed and earn a reprimand; any additional lapses could result in disciplinary action. For a simple guide to netiquette, see http://www.albion.com/netiquette/corerules.html

RULES, RULES, RULES (UNIVERSITY POLICIES)

Academic integrity

A major goal of this and most every university course is for you to learn and appreciate subject material. Academic dishonesty ("cheating") actively prevents you from achieving this goal. Academic dishonesty is taken seriously by the University and by me, and <u>will not be</u> <u>tolerated.</u> (See the TAMU-C Code of Student Conduct and the TAMU-C Procedures A 13.04, 13.12, 13.31, and 13.32.)

This conduct is not only considered wrong in this course and at this University, but also in the real world. Engaging in these activities will get you fired from a job and prevent you from getting another job.

Unethical student conduct includes:

- **Plagiarism**, or copying the words of others with the intent of making it look like your own. Whether you use someone else's phrase word for word, or whether you try and change a few words, or even if you just borrow someone else's original idea and don't give them credit, that's unethical. Use your own words whenever possible, give credit to wherever you got an idea, and put direct quotes inside quotation marks.
- **Cheating** involves trying to trick me or others into thinking you did work that you really didn't do, or into thinking you know what you really don't know. This can include stealing exams, changing your answers on a graded exam or assignment and claiming it was graded wrongly, putting your name on someone else's homework, and so on.
 - Searching the Internet for homework solutions and cutting/pasting the text you find is considered cheating. Searching the Internet for help on a topic is okay. For example, supose a question asks "Describe the life cycle of a star that has the same mass as the sun." Typing that phrase into Google and cutting and pasting the text in the answer box is considered cheating. Typing "star life cycles" into Google, reading a few web pages, and summarizing the information in your own words is not cheating.
 - <u>Borrowing a previous student's homework, exams, or solution sets is considered</u> <u>cheating</u>. "Borrowing" includes looking at someone's submitted homework, screen shots, stealing returned homeworks, and so on.

- **Collusion** is working with another person to cheat. This can include copying someone else's answers to an exam or assignment, doing work for another student, buying or otherwise obtaining homework/exam solutions from any source online or off-line, or any other instance of multiple people engaging in some form of cheating or dishonesty. Working with other students on an assignment is fine <u>as long as</u> everyone contributes and each student does their own work.
- Any other activity that, to a reasonable person, looks wrong. If you have any doubt whatsoever whether a certain action is considered dishonest, please ask me *before* engaging in the activity. There is no need to be embarrassed about asking, and I won't penalize you for asking! In this class, if you follow the maxim "it's easier to beg forgiveness than to ask permission", don't expect forgiveness to be forthcoming.

If you engage in academic dishonesty during any graded activity, you will receive no credit for that activity. More than one instance of dishonesty by a student will result in automatic failure of the course and referral of the student for disciplinary action.

For further information, search the Texas A&M-Commerce website for "academic integrity policy".

SmartWork and D2L Brightspace provide me with tools that check for common forms of online cheating and collusion. These include, but aren't limited to: time stamps, location stamps, and automated comparison of essay anwers. I will use these tools.

Examination Policy

- For the online exams you may use whatever static materials you like, including your text, homework solutions, internet searches (as long as you do not cut-and-paste), etc. But see the next point...
- You must work on the exam alone you may not discuss the exam with other students prior to the due date, you may not use any sort of communication like email, Skype, texting, ChaCha, talking, writing, semaphore, etc., etc., etc. to communicate with any other human during or after the exam.
- When an exam is assigned, you will have one week to complete the exam.
- The exams are *timed* and *may only be taken once*, so you will want to study the material well before taking the exam.

"Attendance" Policy

This class will have no required synchronous (live online) meetings. You are encouraged to participate in online discussions when they occur.

Assignment Policy and Due Dates

All assignments are posted on D2L Brightspace. Assignments and due dates will be posted in the main page for each unit. Submission requirements for each assignment will also be given on that page.

Late Work

Late assignments are penalized 10% for each day late (including weekends); after 7 days assignments will receive a zero. Late exams will receive a zero unless approved beforehand.

Dropping The Course

A student may drop this course by logging into their myLEO account and clicking on the hyperlink labeled 'Drop a class' from among the choices found under the myLEO section of the Web page.

Incompletes

I only offer incompletes in extraordinary circumstances. Any student interested in an incomplete should contact me as soon as possible after the situation arises, and should keep in mind that I am not required to give you an incomplete and so may not offer you the opportunity. You should also know that you only have access to a D2L Brightspace course for two weeks following the final day of term.

Administrative Withdrawl

Although I have the right to drop you for excessive absences, I won't do so. You have a right to get an F if you decide to quit working but don't withdraw.

University Specific Procedures

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M University-Commerce Gee Library Room 132 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement

officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u>

document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

The course will cover many of the topics outlined below. The dates will be posted in the online classroom and are subject to change, so pay attention to announcements on D2L Brightspace for final due dates.

1st Block: Tools of the Astronomer

- Unit 1: Introductions (Aug 26 Sep 8); due date on Sept 8
- Unit 2: The Scientific Method & Astronomy (Sep 2 Sep 8)
- Unit 3: Radiation (Sep 9 Sep 15)
- Unit 4: Spectroscopy (Sep 16 Sep 22)
- Unit 5: Telescopes (Sep 23 Sep 29)
- Exam 1: 9/30 10/2

2nd Block: Stars

- Unit 6: The Sun (Sep 30 Oct 6)
- Unit 7: Properties of Stars (Oct 7 Oct 18); 2 week duration and Friday due date
- Unit 8: Stellar Evolution (Oct 19 Oct 30); 1.5 week duration and Wednesday due date
- Unit 9: Star Death (Oct 31 Nov 10); Note 1.5 week duration
- Exam 2: 11/11 11/12

3rd Block: Galaxies and the Universe

- Unit 10: The Milky Way and its Neighbors (Nov 11 Nov 17)
- Unit 11: Cosmology (Nov 18 Nov 24)
- Unit 12: The Big Bang (Nov 25 Dec 4); 1.5 week duration and Wednesday due date
- Exam 3: 12/5 12/6

All work (except exams) is due on the last day of a unit unless otherwised announced.

All extra credit must be turned in by Dec 6.