



Astr 1103.01W: Introductory Astronomy Lab

COURSE SYLLABUS: Fall 2020

INSTRUCTOR INFORMATION

Instructor: Dr. Kurtis A. Williams, Associate Professor Office Location: Room 145, McFarland Science Building

In-person Office Hours:

M 3:00-4:00

W 10:30-11:30

Virtual Office Hours:

T 8:00pm-9:00pm Th 3:00-3:45 pm

Office Phone: (903) 886-5516

University Email Address: Kurtis.Williams@tamuc.edu Preferred Form of Communication: email or Remind chat

Communication Response Time: Before the end of the following business day

Preferred Pronouns: He/his

Graduate Teaching Assistant: Michaela Allen, mallen43@leomail.tamuc.edu

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Required Textbook(s)

None

Required Hardware

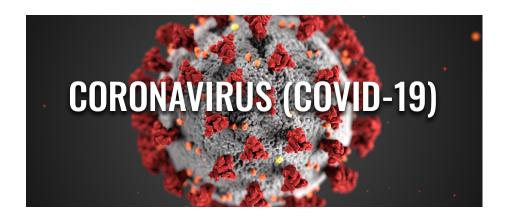
Access to high-speed internet, a computer, printer, and scanner or smart phone camera

Software Required

Stellarium (Free; download at http://stellarium.org/) – do not use the web version.
 Stellarium is also installed on public desktops in the Gee Library.

Suggested Software

 CamScanner app (if using a smart-phone camers; free basic version is sufficient). Download at https://www.camscanner.com/user/download



COVID-19 (Coronavirus) is an ongoing public health crisis. It is a new virus that spreads very easily through the air, and it causes life-threatening complications for some people. Because many people can transmit the virus without symptoms, and because it isn't possible to know who is at risk for dying from a COVID infection, we all need to do our part to keep not just ourselves but each other safe.

Be COVID Safe Like Ricky the Rabid Raccoon!

- Wear a mask at all times!
- Wash your hands often!
- Keep everyone else at least 6 feet away!

Seriously!

In addition:

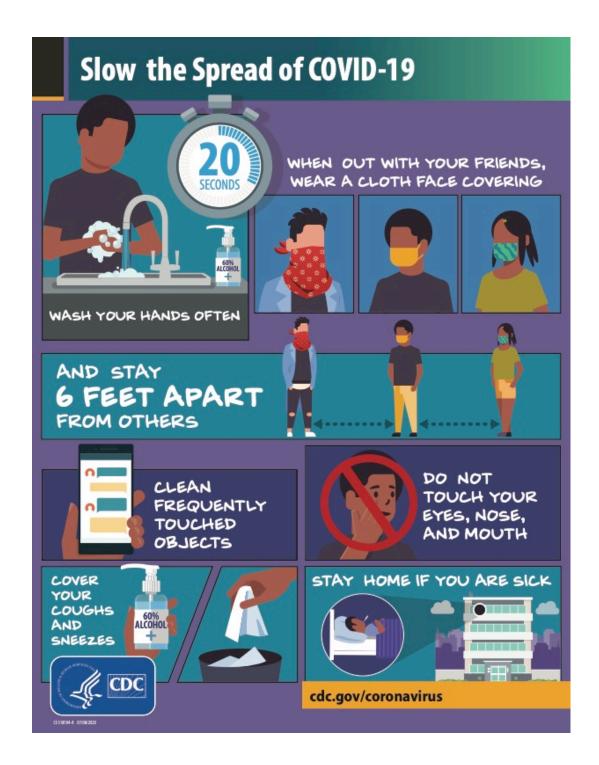


If you need extra time or accommodations on assignments due to COVID: Just ask Dr. Williams! The sooner you ask, the more flexible we can be. Please ask, even for something as simple as you need an extra day to do homework because you had to help your little brother learn how to do online homework for the umpteenth time because he can't get through his stupid little head how to enter his password.

If you are feeling stressed or depressed: first, know you are not alone! Many people, including Dr. Williams, are struggling with anxiety, depression, and other mental ailments because of the pandemic. Mental and emotional struggles are normal in times of constant stress, no matter what anyone else may tell you. FREE HELP IS AVAILABLE; contact the University Counseling Center at 903-886-5145 or visit their website: https://new.tamuc.edu/counseling-center/.

Official University Policy:

A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct.



Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.

Course Description

Hours: 1

This lab course is designed to give students a hands-on approach to learning about stars and galaxies using techniques similar to those used by astronomers. Laboratory activities will include using the planetarium to learn the names and locations of stars and constellations, hands on experiments, and computer simulations.

Most people learn difficult subjects more by *doing* rather than by reading or listening. You can listen to all the lectures and look at all the pictures in the world about how to make fondant cakes (like on Ace of Cakes), but until you screw up several times in the kitchen, you won't actually be able to do it.

Astronomy is the same. You will learn more by doing than anything else in the course. In this course, we present a series of labs that reinforce concepts covered in the lecture course Astr 1303 as well as learn constellations in each of the four seasons.

Student Learning Outcomes:

- 1. You will collaborate with fellow students on laboratory experiences.
- 2. You will collect accurate data during laboratory experiences.
- 3. You will evaluate the results of experiments in light of your collected data.
- 4. You will identify the primary constellations, stars, and deep sky objects of each season

COURSE REQUIREMENTS

Minimal Technical Skills Needed

You will need to be able to access myLeo Online (also called D2L or Brightspace) and be able to learn how to use it. You should also be able to read PDF documents. You should be able to create either Microsoft Word documents (.docx) or plain text files. You must be familiar with Internet usage and safe browsing. You need to be able to watch YouTube videos on a computer.

How To Get Started

myLeo Online Access Information

This course uses myLEO Online, the learning management system at A&M-Commerce. All materials, assignments, and resources will be made available through this system. To access this course, go to: http://myleoonline.tamuc.edu. Log in with your myLEO account and password. Then click on the link to Fall 2020 – Stars and the Universe to get to our course.

How This Course Is Organized

This course is organized by weeks. We will be getting reading and video assignments every Tuesday and Thursday, with online homework assignments coming at the end of each chapter. Be sure to keep up with the assignment and class calendar on myLeo

Online. You should check the course page on myLeo Online often to see what activities and assignments are coming due.

What Should You Do First?

After attending class and reading this syllabus, you should proceed to the course page on myLeo Online and familiarize yourself with the resources. Next, order the course materials if you haven't yet. Finally, begin complete the activities and assignments under "Week of August 24." Due dates are specified on myLeo Online.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

You will need to be able to access myLeo Online (also called D2L or Brightspace) and be able to learn how to use it. You should also be able to read PDF documents. You should be able to create either Microsoft Word documents (.docx) or plain text files. You must be familiar with Internet usage and safe browsing. You need to be able to watch YouTube videos on a computer.

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How This Course Is Organized

This course is organized by weeks. A new lab will be posted every Monday (except for the week of Thanksgiving). Labs will be due the following Monday. Be sure to keep up with the assignment and class calendar on myLeo Online. You should check the course page on myLeo Online often to see what activities and assignments are coming due.

What Should You Do First?

After attending class and reading this syllabus, you should proceed to the course page on myLeo Online and familiarize yourself with the resources. Next, order the course materials if you haven't yet. Finally, begin complete the activities and assignments under "August 24-28." Due dates are specified on myLeo Online.

Instructional Methods

Lab Packets

Each week's lab will have a lab packet that will need to be completed and turned in online. Some weeks will involve watching videos and completing questions based on

the video; others may require you to do some reading, some graphing, and/or some simple calculations.

Most students find it easiest to print out the lab packet, write in answers by hand, and then either scan in the completed packet or take good quality pictures of each page with a smart phone. If you use a smartphone, the free CamScanner app is an easy way to convert your pictures into a single, legible PDF file for upload.

Some labs will ask you to make drawings. For these, please do NOT use a computer to do the artwork – please freehand the sketches and scan them in or take a picture and upload them.

Extra Credit:

There is no extra credit available for this course. If you put your best effort into every lab packet, you should

Teaching Assistant:

This class will be led by Michaela Allen, a graduate teaching assistant. She should be your first point of contact if you have questions. Michaela's email is on the first page of this syllabus – you can email her questions or email her to set up a time to meet by video chat to work through problems. Michaela is much better at most of these labs than I am, which is why I'm putting her in charge!

Student Responsibilities and Tips for Success in the Course

Students who do well in this course share most of the following common habits:

- Checking myLeo Online often for announcements and assignments
- Completing all assignments on time
- · Asking for help and advice early and often.
- Taking responsibility for their own grade.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 59% or Below

Grading is 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 at my discretion; your percentage earned will never go down if I apply such a curve. Your current grades are available through the gradebook on myLEO Online.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browsersupport.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

Email:

Your TA and instructor can be reached at the email addresses on page 1. Please put "Astronomy Lab" in your email subject header. It may take me up to 24 hours to send you a response (48 hours on the weekend or holidays). If you don't hear back from me in that time, please send another email or give me a call.

Office Hours: Office hours are available in both real-world and virtual formats. Office hours are times that I set aside when I promise to be in my office so that you can come by and talk to me. 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.

It's important to realize that office hours are *not* just for students who are having problems in the course. If you are uncertain about <u>anything</u>, please visit, email, phone or drop into virtual hours before your small problems grow into big ones. If you are worried about what might be on the test, stop in. If you are curious about astronomy jobs and research opportunities, come by.

Office hours work best if you have your textbook, 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. You may feel free to stop by my office any time my door is open, but if you do not have an appointment and if it is not my scheduled office hours, please understand if I'm not free to talk at that instant.

Social Media:

Please don't follow me on social media until after you've graduated. You'll be disappointed anyway.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/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 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.
- <u>Cheating</u> 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 entering answers you find is considered cheating. Searching the Internet for help on a topic is okay. For example, suppose 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.
- Borrowing a previous student's homework, exams, or solution sets is considered cheating. "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 A&M-Commerce website for "academic integrity policy".

Smartwork5 and myLeo Online 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 answers. I will use these tools.

Administrative Withdrawal

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.

Assignment Policy and Due Dates

Assignments and due dates will be posted in the myLeo Online course calendar for each assignment. Submission requirements for each assignment will also be given on that page.

Dropping the Course

You may drop this course by logging into your 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 myLEO Online course for two weeks following the final day of term.

Late Work

Late assignments are penalized 10% for each day late (including weekends). After 7 days, late assignments will receive a zero. Exams may only be taken late by arrangement with the instructor, otherwise missed exams will receive a zero. The instructor has final discretion on whether to give a make-up exam. All work must be finished by the end of the day on the last day of classes.

Technical Issues

Personal computer problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, many restaurants, Interstate Rest Areas, etc.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

 $\underline{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as}\\ \underline{px}$

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Students with Disabilities -- 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 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ

ices/

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.

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.

Sexual Harassment and Violence

Violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know is a victim of harassment, stalking, domestic violence, sexual assault, or related crimes, has been harassed or assaulted, here are some resources for you:

Campus Resources

- Call 911 in emergency situations
- Victim Advocacy and Support: http://www.tamuc.edu/CampusLife/DeanOfStudents/Student Case

<u>Management/Victim Advocacy and Support/default.aspx</u>

- How to Help and Report:
 - http://www.tamuc.edu/CampusLife/DeanOfStudents/Student Case
 Management/Victim Advocacy and Support.aspx
- How to Report a Concern:
 - http://www.tamuc.edu/CampusLife/DeanOfStudents/Student Case Management/Report a concern.aspx
- University Title IX Compliance Office: http://www.tamuc.edu/aboutus/administrativeoffices/president/compliance/TitleIX/ default.aspx
- University Title IX Contact: Michael Hill, 903-468-3104, Michael.Hill@tamuc.edu
- University Police Department Sexual Assault pages: http://www.tamuc.edu/campuslife/campusServices/universityPoliceDepartment/cr imePrevention/sexualAssault.aspx
- University Counseling Center: https://new.tamuc.edu/counseling-center/
- Campus police email: mailto:upd@tamuc.edu

External resources:

Crisis center of NorthEast Texas: http://www.ccnetx.org

Know your IX: http://knowyourix.org

End rape on campus: http://endrapeoncampus.org

Clery Center for Security on Campus: http://clerycenter.org
Not Alone: http://changingourcampus.org/about-us/not-alone/

COURSE OUTLINE / CALENDAR

August 24: Introductory Material will be posted on myLeo Online. No assignment will be due this week.

August 31: The first graded lab will be posted; labs will be posted every Monday thereafter.

November 23: NO LAB POSTED due to Thanksgiving

November 30: Final lab will be posted.

December 9: Final lab due.

This lab has no final exam and no in-person component.