
Astronomy 2323-91 Syllabus

Mission:

Oklahoma Christian University is a higher learning community which transforms lives for Christian faith, scholarship, and service.

Instructor Contact Information

Instructor: Dr. Chris Austin, Associate Professor of Physics

Office: NSW-HSH 202J,

Phone: 405-425-5418

E-mail: chris.austin@oc.edu

Office Hours: Monday, Wednesday, and Friday 9:00-11:00, Monday 12:30-2:30. Due to social distancing most office hours will be handled virtually using email, Google Hangout, or Blackboard Collaborate. Please email if you want to set up a meeting.

Classroom: Online

Class Time: Modules are typically due every Saturday at 11:59 PM. See the schedule for more detail.

Course Web address: [Blackboard](#) for course information, fill in the blank quizzes, virtual labs, and quizzes

Christian Worldview:

The laws of science are the way that God chose for the universe to operate. Understanding these laws brings us to a closer understanding of God.

Astronomy Goals

As a Christian community of learning, we seek the following outcomes:

Active Faith:

The student will explain why or why not the money spent on Astronomy is worthwhile.

Foundational Knowledge:

The student will explain feature of: Earth, the other planets, the Sun, comets, asteroids, and the history of astronomy.

Structured Reasoning:

The student will apply the scientific method to perform and design experiments.

Critical and Creative Thinking:

The student will develop and test a hypothesis to explain observations.

Effective Communication:

The student will write a paper about scientific issues.

The student will discuss issues about the environment in a discussion board.

Data will be taken (final paper) in Active Faith for assessment purposes. Lab scores will be used to assess critical and creative thinking.

Textbook and Course Materials:

Astronomy by Andrew Fraknoi, David Morrison, and Sidney C. Wolff. This textbook may be accessed for free at [OpenStax website](https://openstax.org). To read the book you can either download a pdf, print the textbook, view the textbook on the OpenStax website. The pdf for every chapter is also available on the Blackboard site. You also may purchase a hard copy from the bookstore if you wish, but it is not required

The course blackboard website also provides course information and is required reading.

Oklahoma Christian Catalog Course Description:

This course explores the fundamental concepts of astronomy, including historical perspectives as well as current interpretation of celestial phenomena. Includes comparison of other planets with the Earth, and examines stars, stellar life cycles, galaxies, and cosmology. Hands-on laboratory exercises are integrated into the course. 4 hours per week. This course is normally offered every semester and summer.

Prerequisites:

There are no prerequisite for this course.

Major requirements this course fulfills:

It fulfills 3 of the required 6 hours of science from the core curriculum. This course does count as a science course with a lab.

Course Structure and Requirements:

Astronomy is an online course with a module due Saturday at 11:59 PM. Each module will represent one or two chapters in the textbook. A module will consist of a fill in the blank quiz, a virtual lab, and a quiz for a given chapter. The quizzes and labs will be easier if the material is read before attempting the assignments. The order that you complete the material in the module does not matter, just as long as it is finished before the due date. The student will also complete a short reflection paper by the end of the course. The requirements of the paper will be posted in Blackboard. The student will then make additional comments on other students' reflection papers.

The student should expect to spend 3 to 5 hours working on a module and should plan accordingly. This means you should expect to spend 3 to 5 hours a week on this class. Remember if you attended a traditional version of the course you would be in class for three to four hours a week plus whatever work you would do outside of the class meetings. An online course should have an equivalent workload as a traditional course.

Communication with the Professor:

The course website will be the student's most valuable information resource. The course website is located on the [Oklahoma Christian Blackboard website](#). This will be the only method of communicating reading assignments, homework assignments, labs, quizzes, paper information and any special announcements for this course. **Be aware and visit regularly!**

To log in to the Blackboard website use your firstname.lastname and password. All students should verify that they can log in at the start of the course. Students should contact IT services at (phone number 405-425-5555) or [the helpdesk](#) if they encounter any difficulty with the Blackboard website.

Fill in the blank quizzes, lab simulations, chapter quizzes, and participation through the discussion boards will be completed in Blackboard.

Try my office phone if you need to contact me. I might not be in the office so e-mail is the best way to contact me with questions or problems. I check my e-mail regularly.

Any questions regarding the quizzes or labs need to be posted in the appropriate discussion forum rather than being sent to the professor. This will allow everyone to have the same information to attempt the work.

Course Component Weighting:

The student's course grade will be determined as follows:

Course Component	Course Weight
Fill in the blank quizzes	10%
Virtual Labs	40%
Chapter Quizzes	30%
Reflection Paper	20%

Grading Scale

Under no circumstances will any grade be considered for 'curving' if all required work has not been submitted - students who are unwilling to help themselves by doing the required work deserve no additional unearned help. The final course grade will be determined by the following table:

Weighted Final Average	Final Course Grade
1.000 - 0.900	A
0.899 - 0.800	B
0.799 - 0.700	C
0.699 - 0.600	D
0.599 - 0.000	F

Course Components

Students taking this course may eventually become responsible for effective communication in their jobs. Society's tacit assumption is that professionals are as well-prepared as possible, with high University-level academic performance and skills. Part of this preparation is effective writing, so be certain to proofread your work prior to submitting any written assignment: **all assignments will be graded on grammar usage in addition to content.**

Modules

Each chapter is divided into Modules. Each module has a fill in the blank quiz, a virtual lab that uses the Think APP, and a ten question multiple-choice quiz. All parts of the module (fill in the blank quiz, lab, and chapter quiz) are typically due Saturday at 11:59 PM.

In addition to the assignments there are other things posted in the module. Some labs have accompanying material that needs to be used to complete the lab. These are also in the module.

There is a helpful hints video folder in every module. It is not required to view the videos, but they are there if you need them.

Fill in the blank quizzes

Fill in the blank quizzes are completed in Blackboard. They involve the ten of the vocabulary words at the end of the chapter. The answers must be spelled correctly in order to receive credit. The students may take the fill in the blank quiz as many times as they want with the highest score being recorded.

Virtual Labs

Labs are submitted using the THINK APP, which is provided through Blackboard. Labs will be graded on a 20-point scale for appropriate content and science process. Labs will be equally weighted and averaged to form the student's final lab component score. Make sure to use your login when answering questions in the THINK APP.

Lab reports have a clearly documented structure that must be followed. Labs will be evaluated, not interpreted: it is the student's responsibility to provide clearly written complete labs. Lab scores will be determined by the logical consistency, evidential support, investigational appropriateness, science process usage, and clarity of the written explanation.

Most labs will use simulations. The link to the simulation is provided in every module. Occasionally there will be additional material that will be required to complete the lab. This will also be posted in the Module.

Labs are due at 11:59 PM on the day the module is due. No late lab will be accepted for any reason. Start the labs early enough to solve any technical difficulties that may arise.

Chapter Quizzes

Quizzes will be completed in Blackboard. Quizzes consist of ten multiple choice questions from the textbook chapter for that module. The quizzes may be attempted multiple times, the highest score will be recorded. The questions are selected at random, so one student may

get a different set of questions than a different student. You will also get a different set of questions each time you attempt the quiz.

Quizzes are due at 11:59 PM on the day the module is due. No late quiz will be accepted for any reason.

Reflection Paper

The details of the reflection paper will be provided in Blackboard on the first day of class. The reflection paper is due October 3rd at 11:59 PM. There will be a 20% deduction on the paper for every day that it is late.

Participation

Discussion boards are provided in Blackboard to assist you in completing labs and quizzes. Any question on labs or quizzes needs to be posted in the appropriate discussion board rather than being sent to the professor. You can know when questions are asked by subscribing to each forum. I have subscribed to each forum and will answer questions that are posted in the forum. You may also answer questions in the discussion board.

Use of the discussion board is not required, but you may earn up to a 2% bonus if you consistently post/answer questions in the discussion board. More points will be awarded for answering questions rather than asking questions. Posts such as I agree, good answer, etc. do not qualify as a quality post.

I want people helping each other in the discussion forums, but do not post too many solutions in the discussion forum. Posting solutions will be considered an academic dishonesty violation. It is also considered an academic honesty violation if it is clear that the group members are dividing up the work.

Course Policies

Make-Ups:

No late work will be accepted on the modules. Access to every module has been provided. Work ahead if you know you are not going out of town and will not be able to complete the work.

A Note about COVID-19

You have probably seen the following or something similar in your syllabus for other classes.

As you know, this semester will be very different from any previous semester at OC – it started early and will end early with no breaks in between. The change in the calendar also means that the semester includes three fewer days of classes than normal.

While OC is planning for classes to occur face to face all semester, the pandemic may force us to go online at some point. If that happens, I want you to know that I've planned this class so that we can make that change smoothly. Other forms of instruction modality may be used for this course, whether fully in-person; fully online (asynchronous); remote (online but with a set, synchronous meeting pattern); or blended as OC flex model.

If you have tested positive for COVID-19 or know that you have been exposed to COVID-19, please do not come to class until you have been cleared by a medical professional, such as

the COVID-19 Clinical Officer. If you have to miss class, please send me a copy of communication from a medical professional saying that you have tested positive or have been exposed. I will also need a copy of communication from a medical professional, or from a member of the OC housing staff if the student is actually in quarantine, saying that you are no longer contagious or have negative test results before you can return to class. If you are quarantined, I will work with you so that you do not fall behind in your coursework. Your attendance grade will not be reduced because of quarantine if appropriate documentation is supplied, as mentioned above.

Please consult the [COVID-19 Roadmap to Readiness Manual for Students and Parents](#) for information and guidelines.

This class is already online so the shift will not be dramatic. As a matter of fact the course did not change at all when my online courses shifted online last spring. With that being said if you get sick with COVID-19 please let me know. Send me verification from a medical professional and I will work with you. I have had a friend who was diagnosed with COVID-19 and she was sick for three weeks, so I know the seriousness of COVID. Assignments in this class should be the least of your concerns if you get sick, so let me know and I will work with you on the due dates.

Grade Appeals:

Any grade appeals on anything that is graded (papers, quizzes, labs, etc.) must be made within one week of that assignment being graded. The instructor will not consider any grade appeals after one week.

Withdrawals:

The University Withdrawal Policy will be strictly followed.

Office Hours:

Unless there is a strong reason to meet in person, office hours will be held through electronic means (Google Meet, Blackboard Collaborate, email) to make sure social distancing policies are met. Please email me to set up an appointment as needed.

Students are encouraged to visit with me as needed and as office hours permit. Students are expected to attend office hours prepared - this implies having attempted the homework problem, lab, quiz, etc. The course material builds on itself, so get the needed help as early as possible.

Formatting requirements:

The formatting requirements for the paper will be discussed in the documents describing the paper. The only formatting requirement for the labs and quizzes are that they are completed in the websites that are provided.

Formatting instructions on the papers will be given when the paper is assigned.

Citation Standards

I will leave all citation standards up to the student. The student must cite their sources on the final paper, but they may use the standard that they are familiar with from their major.

Required Educational Technology:

This section contains information on educational technology that students need to know and be comfortable using. Contact Dr. Austin or support central if issues arise.

1. **Word Documents of pdf:** The student needs to be familiar with writing documents. The final paper must be submitted as a Microsoft Word document of a pdf. Pages documents will not be accepted.
2. **Laptops:** Laptops are required to run simulations. Typically the simulations run best using a laptop. If you do not own a laptop then there are computer labs on campus you can use, or you can borrow a laptop from a friend. Laptops are also needed to access Blackboard.
3. **Downloading programs:** You will need to be able to download and run programs. These programs are typically JAVA, Flash, or HTML 5. Links are provided in Blackboard to download JAVA or Flash if needed. Support Central can help with this if needed.

Technology Expectations

Start the fill in the blank quiz, lab, and quiz early enough to resolve any technology issues before the due date. Technology issues are not an excuse for not being able to complete any assigned work on time.

Contact me as soon as possible if you need help. If the issue is with the lab, quiz, or final paper I will either be able to help you or we will work with [Oklahoma Christian Information Technology \(Support Central\)](#) (phone number 405-425-5555) to try to come up with a solution.

Failure to notify Dr. Austin of any technical issues **during** lab zero (in other words the first week of the class) will result in a zero for lab zero. Technical issues need to be solved at the start of the semester as opposed to when the lab comes up in the schedule.

Inclement Weather Policy:

The Oklahoma Christian University inclement weather policy is:

- Classes will run as usual unless the University is closed.
- In the event that classes are cancelled, students will be responsible for reading over the material that was to be covered that day. They will also be responsible for the assignment. During the next class section, questions will be addressed concerning these sections.
- In the event that classes are canceled on a day that a test was scheduled, the test will be given on the very next day and the schedule will be adjusted.
- In the event that inclement weather occurs during final exam week, every effort will be made to hold the finals in an alternate location; and if that is not possible, your final grade will be calculated on all work submitted previous to the exam.

Since this is an online class the due dates will not be moved due to weather unless there are extreme circumstances.

Schedule and Course Modification:

The instructor reserves the right to modify the schedule as needed. Any schedule changes will be announced in class and through e-mail. The new schedule will be posted in Blackboard.

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Classroom Behavior:

So in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets. (Matthew 7:12 NIV)

As a Christian community of learners I expect everyone in class to treat others with respect. You lose discussion board privileges and forfeit any participation bonus if I feel that you are not treating others with respect. Repeated violations will result in a zero for the course component where the issue occurs.

Any Title IX violations will be reported to the appropriate authorities.

Anti-Harassment and Discrimination Policy (Title IX):

Oklahoma Christian University is a Christian community unequivocally committed to ensuring a working and learning environment in which the dignity of every individual is respected and providing a campus environment that is free of unlawful discrimination, which includes sexual harassment, sexual assault, or sexual misconduct. OC's Sexual Misconduct Policy (see the OC Student Handbook) is compliant with Title IX, which states, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Sexual harassment is a breach of community, which expresses disrespect, exploits and undermines relationships based on trusts, and interferes with learning and productive work.

Students are encouraged to immediately seek available assistance and report incidents of sexual misconduct as defined by the Sexual Misconduct Policy to either the Title IX Coordinator or one of the Title IX Deputy Coordinators listed below:

Title IX Coordinator Mrs. Lisa Herndon 405.425.1820 lisa.herndon@oc.edu

Students have access to confidential services through OC's Counseling Center and the Spiritual Life office.

OC Counseling Center 405.425.5250

Spiritual Life

Jeff McMillon, Dean of Spiritual Life

405.425.5919

Academic Honesty

Oklahoma Christian University Policy on Academic Honesty

Cheating

Cheating on an examination, assignment, roll sheet or other course related work or activities undermines the ethics of the academy and the specific Christian purposes of Oklahoma Christian University. Accordingly, students who cheat on examinations, assignments or other course related work or activities will face serious consequences, as outlined in this policy.

Plagiarism

One particular form of cheating is plagiarism. Plagiarism is the transmission of another's ideas, words, or materials as one's own and/or the failure to credit accurately the ideas, words, or materials of another. Plagiarism also includes passing off another's work (a friend, a parent, a website) as one's own. Plagiarism undermines the ethics of the academy and the specific Christian purposes of Oklahoma Christian University. Accordingly, students who engage in plagiarism in assignments submitted will face serious consequences, as outlined in this policy.

Penalties for Academic Dishonesty

1. On the first offense, the student will receive zero (0) credit for the examination or assignment. For forms of cheating or dishonesty other than on examinations or assignments, the Professor shall have the discretion to impose an appropriate penalty. Professors must send documentation of the first offense to the appropriate chair, the dean of the appropriate college, the Chief Academic Officer, and the Dean of Students.
2. On the second offense in the same course, the student will receive an F in the course. Professors must send documentation of the second offense to the appropriate chair, the dean of the appropriate college, the Chief Academic Officer, and the Dean of Students.
3. At either the first offense or second offense, the student may appeal using the process described in both the *OC Student Handbook* and the *OC Academic Policy Manual* covering Grade Appeals.
4. If the student commits offenses in two or more courses, the Academic Appeals Committee, described in the *OC Student Handbook* and in the *OC Academic Policy Manual*, may assign penalties for academic dishonesty in addition to the penalties assigned by the professors in the courses. The Academic Appeals Committee may impose penalties up to and including suspension from the University in instances where a student has engaged in cheating or plagiarism in two or more courses. The Academic Appeals Committee will inform the Chief Academic Officer and the Dean of Students in writing of any penalties imposed by it and will report annually on its activities to the University's Academic Affairs Committee.
5. Professors should maintain the highest standards of academic honesty both in and out of the classroom. Professors must report and apply the rules regarding cheating/plagiarism

to the appropriate channels. The student should be referred to the Oklahoma Christian University Covenant for principles which should guide conduct in these matters.

Astronomy Academic Integrity Policies:

No assignment, lab, or paper may be identical or overtly similar to another person's. Academic integrity policies on the paper will be posted in Blackboard.

I want people helping each other in the discussion forums, but do not use the discussion forum to split up the work. If this occurs then everyone who participated will get a zero.

Invalid time stamps in the lab will also be considered an academic dishonesty violation.

Academic dishonesty is the instructor's least favorite interaction; do not put yourself or others in that situation. All involved persons receive scores of zero for assignments and be reported to the proper academic authorities as stated in the Oklahoma Christian Handbook for the first instance of academic dishonesty. Second-time offenders will receive an 'F' course grade and be reported to the proper academic authorities. Oklahoma Christian University policies on Academic Honesty will be strictly followed.

MASH (Math and Science Help):

The University offers free tutoring most weeknights for students enrolled in Physics, Chemistry, and Biology through the student success center. Other sources of help may include:

1. Tutoring-Student Success, phone number (405.425.5923). [Click here for the Student Success website.](#)
2. Writing Help-Writer's Block. [Click here for the Writer's Block website.](#)
3. Research Help-Library, phone number (405.425.5312)
Research Help-Ask a Librarian (libanswers.oc.edu/), [Click here for the library website.](#)
4. Information Technology-Support Central, phone number (405.425.5555), [Click here for the OC Information Technology website.](#)
5. Blackboard Help-Link in Blackboard (usually on left side) or click [here.](#)
6. Calling & Career Office- Day Six (located directly below Admissions), provides career counseling, strengths analysis, resume and portfolio building, interview mastery, network building, career search/ landing, and more.
Phone number (405.425.5961), [Click here for the day six website.](#)

Americans with Disabilities Act

If you have a diagnosed disability and need special accommodations, please notify Ms. Katy Roybal (425-1876) before or immediately after your first scheduled class meeting. After your disability has been verified, your instructor will work with you, with Ms. Roybal, and with the Office of the Vice President of Academic Affairs to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this course.

Emergency statement:

In case of an emergency, faculty, staff, and students who have signed up for [OC Campus Messenger](#) will be notified by text, email, or Twitter. If the emergency occurs during class, the instructor will inform the students present of the appropriate procedures.

Additional Reading:

Some additional excellent basic books include:

Chiasson and McMillon, Astronomy, Pearson
Arny, Explorations an introduction to Astronomy, McGraw Hill
Seeds, Foundations of Astronomy, Cengage

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