



FLORIDA GATEWAY COLLEGE

AST1002 0I1 - Astronomy Fall 2025 – A16 Online

Instructor Information

Name: James Givvines, Professor of Physics

Email: james.givvines@fgc.edu or through Canvas message. I should respond to your correspondence within one business day.

Office: Building 4 room 3.

Office Hours: TBA

Office Phone: 386-754-4221

Other Available Hours: call or email to schedule

Course Information

Credits: 3

Requirements Met: AATR, GE, GEC

General Education Area: Group 2 Science

Prerequisites: MAT1033 with a C or better, or score out on appropriate placement test.

Course Description

This introductory astronomy course is an online course. Your coursework will be done on your own, using the required textbooks and an internet-capable computer; your instructor will provide video lectures to assist in your understanding. Because the course is online, it can be challenging: you will be expected to spend a good deal of time reading from the textbook, following along with the videos and completing online tutorials. **Expect to spend between 8 to 12 hours, on average, per week.** You will be rewarded for your effort, however! We will be studying a subject that has fascinated human beings since the dawn of time. We will cover many interesting topics such as: the scale of the universe, patterns in the night sky, the Copernican revolution, the nature of light, the origin of our solar system, our star the Sun, star formation and lifetimes, our galaxy the Milky Way, and the possibility of life in the universe.

Required Texts/Learning Resources

Bennett, J. O., Donahue, M. O., Schneider, N., & Voit, M. *Essential cosmic perspective* (8th ed.). Pearson. ISBN-13: 978-0134602080.

Mastering Astronomy, which contains tutorials, movies, interactive figures, and quizzes. Your new textbook will come with an access code and Mastering will be accessed directly through Canvas. Alternatively, you can purchase the code and a used textbook. (Also, it looks like eBook comes with the access code).

General Learning Outcome

- **Scientific Reasoning:** Students will apply empirical evidence to evaluate natural phenomena.

Course Learning Outcomes

At the end of the course, you will be able to:

- Recall the laws and major theories presented and relate them to the history of astronomy.
- Define key terms used throughout astronomy (found in the Glossary of the textbook).
- Paraphrase or summarize (in writing) the basic concepts of astronomy relating to physical laws, structure of the solar system/galaxy/universe, stellar formation, stellar evolution and distance measurements.
- Discuss what data supports scientific theories in each astronomy topic covered.
- Use diagrams and graphs effectively.

Critical Dates – Fall 2025

Date	Event
Monday, August 18	Fall A16 and A8 classes start
Monday – Wednesday, August 18-20	Add/Drop period for Fall A8
Monday – Friday, August 18-22	Add/Drop period for Fall A16
Monday, September 1	Labor Day – No Classes
Monday, September 15	Fall B12 classes start
Monday – Wednesday, September 15-17	Add/Drop period for Fall B12
Friday, September 26	Deadline for student-initiated withdrawals – A8
Monday, September 29	Fall B10 classes start
Mon. – Wed., Sep. 29 – Oct. 1	Add/Drop period for Fall B10
Friday, October 10	Fall A8 classes end
Monday, October 13	Fall B8 classes start
Monday – Wednesday, October 13-15	Add/Drop period for Fall B8
Tuesday, November 7	Deadline for student-initiated withdrawals – A16
Tuesday, November 11	Veteran’s Day – No Classes
Monday, November 14	Deadline for student-initiated withdrawals – B12
Thursday, November 18	Deadline for student-initiated withdrawals – B10
Monday, November 21	Deadline for student-initiated withdrawals – B8
Wednesday – Friday, November 26-28	Thanksgiving Break – No Classes
Monday, December 5	Fall A16, B12, B10, and B8 classes end

Schedule of Class Events

Module	Dates	Topic(s)	Coursework
START HERE	8/18/2025	<ul style="list-style-type: none">• Course Introduction	<ul style="list-style-type: none">• Instructor Information• Course Information• Learner Support• About FGC• Introduction to Mastering Astronomy
1	8/18 – 8/24	<ul style="list-style-type: none">• Scale of the Universe• History of the Universe• Earth's Motion	<ul style="list-style-type: none">• Read Chapter 1• Video 1-1• Video 1-2• Video 1-3• Mastering Astronomy Homework 1
2	8/25 – 8/31	<ul style="list-style-type: none">• Patterns we see in the night sky• Why seasons occur• The moon• The planets	<ul style="list-style-type: none">• Read Chapter 2• Video 2-1• Video 2-2• Video 2-3• Mastering Astronomy Homework 2
3	9/1 – 9/7	<ul style="list-style-type: none">• Ancient roots of Science• Ancient Greek Science• The Copernican Revolution• The Nature of Science	<ul style="list-style-type: none">• Read Chapter 3• Video 3-1• Video 3-2• Video 3-3• Mastering Astronomy Homework 3• Unit 1 Exam
4	9/8 – 9/14	<ul style="list-style-type: none">• Describing Motion• Newton's Laws of Motion• Conservation Laws in Astronomy• Gravity	<ul style="list-style-type: none">• Read Chapter 4• Video 4-1• Video 4-2• Video 4-3• Mastering Astronomy Homework 4
5	9/15 – 9/21	<ul style="list-style-type: none">• Basic properties of light• Spectra	<ul style="list-style-type: none">• Read Chapter 5• Video 5-1• Video 5-2• Video 5-3

Module	Dates	Topic(s)	Coursework
		<ul style="list-style-type: none"> • Telescopes 	<ul style="list-style-type: none"> • Mastering Astronomy Homework 5
6	9/22 – 9/28	<ul style="list-style-type: none"> • Nebular Theory of Solar System formation • How we find planets about other stars • What are those planets like • Changing view of Star formation 	<ul style="list-style-type: none"> • Read Chapter 6 • Video 6-1 • Video 6-2 • Video 6-3 • Mastering Astronomy Homework 6 • Unit 2 Exam
7	9/29 – 10/5	<ul style="list-style-type: none"> • A closer look at our Sun • Nuclear fusion • Sun cycles 	<ul style="list-style-type: none"> • Read Chapter 10 • Video 10-1 • Video 10-2 • Video 10-3 • Mastering Astronomy Homework 10
8	10/6 – 10/12	<ul style="list-style-type: none"> • Properties we measure for Stars • Patterns we see among stars • Star Clusters 	<ul style="list-style-type: none"> • Read Chapter 11 • Video 11-1 • Video 11-2 • Video 11-3 • Mastering Astronomy Homework 11
9	10/13 – 10/19	<ul style="list-style-type: none"> • How do stars form • Life stages of stars • How do stars die • Systems with multiple stars 	<ul style="list-style-type: none"> • Read Chapter 12 • Video 12-1 • Video 12-2 • Video 12-3 • Mastering Astronomy Homework 12
10	10/20 – 10/26	<ul style="list-style-type: none"> • White Dwarfs • Neutron Stars • Black Holes 	<ul style="list-style-type: none"> • Read Chapter 13 • Video 13-1 • Video 13-2 • Video 13-3 • Mastering Astronomy Homework 13 • Unit 3 Exam

Module	Dates	Topic(s)	Coursework
11	10/27 – 11/2	<ul style="list-style-type: none"> • The shape, size and structure of the Milky Way • History and future of the Milky Way • The Galactic Center 	<ul style="list-style-type: none"> • Read Chapter 14 • Video 14-1 • Video 14-2 • Video 14-3 • Mastering Astronomy Homework 14
12	11/3 – 11/9	<ul style="list-style-type: none"> • Types of galaxies • How to measure distance to galaxies • How galaxies evolve • Active Galactic Nuclei 	<ul style="list-style-type: none"> • Read Chapter 15 • Video 15-1 • Video 15-2 • Video 15-3 • Mastering Astronomy Homework 15
13	11/10 – 11/16	<ul style="list-style-type: none"> • The Big Bang Theory • Evidence to support the model • History of the Universe 	<ul style="list-style-type: none"> • Read Chapter 17 • Video 17-1 • Video 17-2 • Video 17-3 • Mastering Astronomy Homework 17
14	11/17 – 11/23	<ul style="list-style-type: none"> • Life on Earth • Possible life in the Solar System • Possible life around other stars • SETI 	<ul style="list-style-type: none"> • Read Chapter 18 • Video 19-1 • Video 19-2 • Video 19-3 • Mastering Astronomy Homework 18 • Unit 4 Exam
	12/1 – 12/5	<ul style="list-style-type: none"> • Final Exam 	<ul style="list-style-type: none"> • Final Exam

Student Expectations

Attendance

This is an online class. You should be participating by reading the book and following along with online materials weekly.

Courtesy and Student Conduct Code

Students need to be courteous to everyone for all online work submitted.

Late Work

Work after the deadline will have a 10% penalty.

Grading Policies (Student Performance Measures)

Learning Activities

Mastering Astronomy (50%): Mastering Astronomy is the main component of learning in this course.

Unit Exams (35%): The course will have 4 Units: Unit 1 (Chapter 1-3), Unit 2 (Chapter 4-6), Unit 3 (Chapter 10-13) and Unit 4 (Chapter 13-15, 17, 18)

Final Exam (15%): A comprehensive final exam.

Grading Scale

A	–	90% - 100%
B+	–	87% - 89.9%
B	–	80% - 86.9%
C+	–	77% - 79.9%
C	–	70% - 76.9%
D	–	60% - 69.9%
F	–	59.9% or below

Returning Grades

I will grade most assignments within one week of the due date. For more expansive assignments, I will return them within two weeks. This gives me ample time to provide constructive, useful feedback to help you progress and grow as a student in this course.

Student Support and Tech Needs

This course requires students to have access to a computer and the internet. For those students who do not own a computer, computer labs are available on the FGC campus and in public libraries. Students without internet can come to the FGC campus, go to local public libraries, coffee shops, etc.

Minimal technical skills require for this course include the ability to use Microsoft Office products and navigate the Internet.

If you have any additional questions, please contact IT at 386-754-4408. You can also email the Florida Gateway College helpdesk at helpdesk@fgc.edu.

Florida Gateway College Policies and Statements

The Library

The Wilson S. Rivers Library is located in Building 200 and also includes millions of e-books and articles (<https://www.fgc.edu/academics/library/>). The library has more than 70 computers with 50 pages daily of free B&W printing for students. There are also small and large study rooms available for two hours at a time. Click the link above for more information. Librarians are available to assist with research help, and there are helpful videos on library searching and citation help here: (<https://www.fgc.edu/academics/library/research-help-and-guides/>).

Phone- 386-754-4401

Email- library@fgc.edu

[Ask-A-Librarian](#) text and chat

Fall & Spring Semester Library Hours

Monday – Thursday: 7:30 am – 7:30 pm

Friday: 9:00 am – 4:00 pm

Saturday: 1:30 pm – 5:30 pm

Sunday: CLOSED

Summer Semester Library Hours

Monday – Thursday: 7:30 am – 6:30 pm

Friday: CLOSED

Saturday & Sunday: CLOSED

Student Success Center (SSC)

The Student Success Center (SSC) is located in Building 008. The SSC offers a variety of resources for students and faculty. Access to computers and limited printing is available. Copies of reference books, textbooks, access to course specific software, and access to tutors for all levels of math and writing are available in the SSC. Tutoring in other subjects is also offered. The SSC provides space for students to study in subject specific learning groups. Stop by or call the Student Success Center to request the most current tutor schedule (386-754-4382).

Fall Semester SSC Hours

Monday--Thursday: 8:00am – 6:00 pm

Friday: 9:00am – 4:30pm

Spring Semester SSC Hours

Monday--Thursday: 8:00am – 6:00 pm

Friday: 9:00am – 4:30pm

Summer Semester SSC Hours

Monday – Thursday: 7:30 am – 5:00 pm

If you have any questions, you may contact the center by phone at 386-754-4479, 386-754-4382, or by emailing Christina Slater at christina.slater@fgc.edu.

EAB Navigate

The SSC initiates student progress reports to the entire campus through EAB Navigate. EAB Navigate is an early-alert tool designed to identify students who may be susceptible to falling behind in their course before they actually do.

Twice during the semester, we provide instructors with the opportunity to ALERT students of their course progress. This is done through the FGC Wolves email account. Students may receive an email stating their success may be at risk in a specific course. If you receive this email, DO NOT PANIC. Please contact your instructor directly, your academic advisor, and the SSC. Your instructor's information is provided in the email.

Navigate Student is a mobile app designed to support students during their academic careers at FGC. Navigate Student is the ultimate student resource that acts as a personal advisor and provides students with the information they need, when they need it. Additionally, students may make an appointment with an advisor, view campus events, be alerted on important to-do's, view class schedules, explore their major, and much more.

Please do not allow yourself to struggle. We are here to help you achieve success. The mission of the SSC is to help encourage and promote your educational journey here at FGC and beyond.

Class Recording

A student shall not make a recording in class unless the recording is limited to the class lecture, and

1. the recording is made for the student's personal educational use,
2. in connection with a complaint to the college, **or**
3. as evidence in or in preparation for a criminal or civil proceeding.

Students are not permitted to record in class, through any means over any medium, any academic or other activity that is not a class lecture. A recording of any meeting or conversation between students, or between students and faculty, is strictly prohibited unless all parties have consented to such recording. A recording of a class lecture may not be published without the prior express written consent of the recorded faculty member.

Resource Information

Florida Gateway College has partnered with **BetterMynd**, (<https://www.bettermynd.com/students>) an online therapy platform for college students, to offer our students access to free video-therapy sessions with their diverse network of licensed mental health counselors.

Florida Gateway College students can now access free online therapy sessions on the BetterMynd platform with the counselor of their choice. These 50-minute, live video-sessions are private,

confidential, and can take place from the convenience of your laptop, smartphone, or tablet. Sessions are available during the day, at night, and on the weekends.

To register and get started with a counselor that's a good fit for you, sign-up here.
(<https://app.bettermynd.com/register>)

If you have any questions about these services, you can email BetterMynd at students@bettermynd.com.

If you are in the need of additional resources please contact the Director of Student Life, Amy Dekle, at amy.dekle@fgc.edu, or by visiting Building 007.

Academic Appeal; Grievances; General Complaint

If a student wishes to file an academic appeal, grievance, or general complaint, please visit the college's website. Under Students and the Complaints & Appeals section (<https://www.fgc.edu/students/complaints-and-appeals/>), information regarding policy, procedure, and forms related to these topics is provided.

College Course Withdrawal and Drop Process

A course may be dropped only during the published add/drop period. After add/drop, students must withdrawal from their course. Please visit the [College Catalog](#) for more detailed information about the drop and withdrawal process.

Students are responsible for withdrawing by the published deadline. Students must allow sufficient time for the process to be completed. **The fully approved withdrawal form is due to Enrollment Services by 4:30 p.m. on the deadline posted on the [Academic Calendar](#) or it is considered late.**

To withdraw from a course, the following steps must take place:

1. The student obtains the instructor's authorization and last date of attendance in person or via email.
2. The student meets with an academic advisor, who will sign the form (Building 14). Or, if an online student, emails the advisor a statement requesting a withdrawal from the course. The email must include the instructor's email with the last date of attendance.
3. The advisor will complete a withdrawal form, attach the emails from the student and instructor in lieu of signatures and forward the form to Financial Aid.
4. A Financial Aid representative will complete and sign the form and forward the form to Enrollment Services to be processed.

Students are strongly encouraged to begin the withdrawal process the day **before** the withdrawal deadline to allow sufficient time for the process to be completed by all offices involved (Instructor, Advising Services, Financial Aid, Enrollment Services).

It is the student's responsibility to understand all financial and academic implications of the withdrawal. Students are permitted a maximum of two (2) withdrawals per course. Upon the third attempt, a student must receive a grade for the course. Absence from class or merely notifying the professor does not constitute withdrawal. A student who stops attending class without withdrawing will receive a grade from the instructor.

Incompletes

Incomplete grades are reserved for students who are unable to complete a course and the withdrawal date has passed. A student should only be issued an incomplete if at least 75% of the course assignments have been submitted and the student can reasonably complete the remaining assignments **within the first three weeks** of the next term to earn a passing overall grade. Otherwise, students should be issued the earned letter grade in the course at the end of the current term.

The **Incomplete Grade Request Form** must be completed and submitted for approval by the **FIRST day of Final Exams and BEFORE** issuing the "I" grade. The instructor will describe the circumstances leading up to the requested "I" for the course, and list the missing assignments, quizzes, exams, and any other course requirements needed to satisfactorily complete the course **within the first three weeks** of the next term. The form must be signed by the instructor, student, and the Dean/Executive Director over the program. Once all participants have signed, an approval email will be sent to the instructor for authorization to assign the "I" grade.

Student Communication Standards

You are expected to communicate in a professional and respectful tone with the instructor and fellow classmates. All written communication (in email correspondence, discussion forums, assignments, quizzes and exams, etc.) must use proper written English. Please refrain from using online and texting abbreviations and language. Oral communications, if applicable, must be made with a respectful tone and body language. Use proper [netiquette](#) throughout!

Academic Honesty

At Florida Gateway College, we value the development of critical thinking, effective communication, and academic growth. To ensure fairness and uphold the principles of academic integrity, any instances of academic dishonesty (i.e., cheating, plagiarism, bribery, misrepresentation, fabrication, unauthorized use of AI technologies, etc.) are not permitted and will be dealt with severely. Students should make themselves aware of the student code of conduct found in the Student Handbook. We believe in your ability to think critically and develop your own unique perspectives. By adhering to these guidelines and committing to the principles of academic integrity, you will not only enhance your learning experience, but also foster an environment of trust and respect within our academic community.

Use of AI Technologies

The use of AI technologies to generate or assist in the creation and completion of assignments is strictly prohibited, unless explicitly allowed by the instructor as described in the course syllabus. It is your responsibility to read this thoroughly and carefully at the beginning of the semester.

Your assignments should reflect your own thoughts, analysis, and original work. Florida Gateway College employs the use of AI detection tools to assess the authenticity of your assignments. These tools are designed to identify instances of cheating and plagiarism, including the use of AI technologies. Any submissions that violate this policy will be subject to disciplinary action. If you have any questions or concerns regarding the use of AI technologies in your courses, please review your course syllabus or reach out to your instructor for clarification.

Civil Rights and Compliance Statement

Florida Gateway College does not discriminate in education or employment related decisions on the basis of race, color, ethnicity, national origin, gender, religion, disability, age, marital status, genetic information, sexual orientation, pregnancy, or any other legally protected status in accordance with the law. The Civil Rights & Compliance Officer is Cassie Buckles, Executive Director of Human Resources, Building 001, Room 116, 149 SE College Place, Lake City, FL 32025, and may be reached at cassandra.buckles@fgc.edu or by phone at 386-754-4313.

Disability Statement

The Office of Accessibility Services (OAS) is a resource for both students with disabilities as well as faculty. Students with disabilities in need of academic accommodations must first be registered with the OAS to verify the disability, establish eligibility, and determine reasonable academic accommodations.

After registering with the OAS, students must request their academic accommodation letters be sent to them each semester to share with their instructors. Upon receipt of the letter, the instructor will be available during office hours or via email to discuss the accommodations a student will need during the course.

Students with disabilities who are not registered with the OAS or faculty who may have questions or concerns regarding an accommodation, please contact the office at the following:

In person: Building 007, Room 107

Phone: (386) 754-4393

Email: Accessibility.Services@fgc.edu

FERPA Statement

The Family Educational Rights and Privacy Act (FERPA) provides certain privacy rights to students related to educational records. This information can be found in the College Catalog, at the Office of Enrollment Services in Building 015 or on the Florida Gateway College website (www.fgc.edu/students/registration-and-records/ferpa/).

SACSCOC Statement

Florida Gateway College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate and associate degrees. Florida Gateway College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Florida Gateway College may be directed in writing to the

Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

Honorlock Statement

Florida Gateway College has partnered with Honorlock, an online testing proctoring service. If off-campus remote proctoring is required during any course, Honorlock will be the online proctoring service that allows you to take your exam. You **DO NOT** need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection.

To get started, you will need to download the Honorlock Chrome Extension using Google Chrome. You can download the extension on the Honorlock website (www.honorlock.com/install/extension/). When you are ready to test, log into the LMS, go to your course, and click on your exam. Clicking **Launch Proctoring** will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Honorlock support is available 24/7/365. If you encounter any issues, you may contact Honorlock by live chat, by phone at 844-243-2500, and/or by email at support@honorlock.com.

If you encounter a Canvas issue, please contact Canvas via the Canvas Help menu or by clicking the **Canvas Support** link within your course(s).

Turnitin Statement

Instructors may require writing assignments to be submitted to Turnitin when uploaded to Canvas. Turnitin is an internet-based service that looks for similarities and potential plagiarism by comparing your assignment submissions with its massive database of student work (including previous student submissions at Florida Gateway College), the Internet, and its entire archive, books, and journal and reference publications. Turnitin generates a [similarity report](#), which can help you and your instructor determine whether you used sources fairly and ethically, cited correctly, and paraphrased effectively.

You are encouraged to submit your written work to Turnitin prior to assignment deadlines, whether through Canvas or [Draft Coach](#). If needed, that would allow you time to review the [library's research and help guides](#) or seek writing assistance from your instructor or a tutor in the Student Success Center.