

Astro 001
Fall 2023

Course Description: ASTRO 001 Astronomical Universe (3 credits) (GN): An introductory course for non-science majors. It provides a broad introduction to Astronomy with qualitative descriptions of the dazzling and varied contents of the universe. There are no pre-requisites for the course.

Course Topics: The general topics of Astronomy 001 are:

1. General History of Astronomy and Modern Science
2. The scientific method
3. The Earth and Moon
4. How our relative place, orientation, and motion in space dictate our changing view of the sky (daily and yearly sky motions, phases of the moon) and conditions on Earth (arctic, tropics, and seasonal changes).
5. The basic physics of gravity, light, and atoms as it relates to astronomy.
6. Planets
7. The Sun and other stars including, red giants, white dwarfs, neutron stars, and black holes
8. Supernovae, galaxies, and exoplanets
9. Hypotheses regarding how the universe formed and changes (cosmology)
10. Potential of life elsewhere in the universe – The Drake Equation

The main goal of this course is to cover most of these areas of modern astronomy at a level which requires only basic mathematics.

Class Meetings:

Our class meetings will be live, face-to-face as much as possible. However, sometimes due to complications beyond our control, our class meetings may be ‘online’ using ZOOM. My goal in this case is to provide you with similar instruction, interaction, and assessments to those you would have received in the physical classroom.

NOTE: You will access our Zoom classroom when/if needed using a link provided by the instructor at that time. If you are new to Zoom, please read “[Participating in a Zoom Meeting Quick Start Guide](#).” An additional resource is the [joining a test meeting](#) ahead of your scheduled class to practice connecting to a Zoom room.

Class Meeting Times: Mon., Wed., and Fri: 11:15 am – 12:05 pm (Room: 5 Romano)

Instructor: Kip Trout, B.S., M.S., Physics

Office Hours: By appointment. Please text to make an appointment before coming. Good times for me:
Mon. and Wed.: 1:30 – 3:30 pm (text to make an appointment)
Tue. and Thu.: 3:30 – 4:15 pm (text to make an appointment)
Or... other times that work, (text to make an appointment).

Phone: (717)-676-1274 (**Only texts reliably come through. Always text first if you can.**)

Email: kxt7@psu.edu

NOTE: It is *imperative* that you check your Penn State e-mail account *regularly* (daily). Important communications from the university will be sent to your PSU email address.

Communicating with the Instructor:

- **If the message is urgent, then please text the phone number above.**
- Voice calls to my phone are sometimes blocked as scam calls, so always text first.
- If communicating via email, you should always use your PSU email account to communicate with the instructor of this course. Depending upon network servers and filters, the instructor may not receive email from other email domains.
- Please allow the professor at least 24 hours to respond to your email.

CANVAS Announcements:

The instructor will make extensive use of the course ANNOUNCEMENT feature in the CANVAS online course management software system. **(There is more information about CANVAS near the end of this document.)**

It is **imperative** that you set up your CANVAS communications to receive these announcements in a quick fashion. I recommend setting things up so that you get rapid notice on your smartphone. CANVAS Announcements can be sent to your email by going to Account → Notifications → Click the checkmark next to “Announcements” and “Conversation Message” for “Notify me right away.”

You should check CANVAS Announcements on our CANVAS course page often, or else set up CANVAS announcements to immediately forward to your smartphone as discussed above.

Instructor Goals:

Some of your instructor’s personal course goals and objectives for the semester are as follows:

- To help you become a better college student.
- To provide you with:
 - a working knowledge of basic astronomy covered in the course.
 - a conceptual understanding of some basic physical laws of the universe.
 - increased problem-solving abilities.

Required Course Materials:

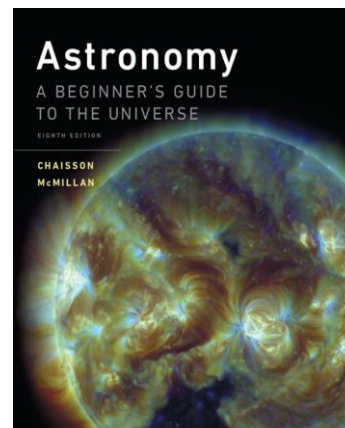
1. You must register for the course materials at Pearson's **Mastering Astronomy** website. Directions are provided on the last page of this syllabus. I believe you can purchase an access code for the Mastering Astronomy account via the campus bookstore, but you will still need to set up your Pearson account for it to work. The Mastering Astronomy account will include an electronic version of the textbook and other electronic materials for the course. A hard copy of the textbook is not required for the course, but this electronic **Mastering Astronomy** account at Pearson **IS REQUIRED**. You will use it in numerous ways, including to submit your graded homework.

TEXT: Astronomy – A Beginner’s Guide to the Universe (8th Ed.)
by, Chaisson and McMillan

2. **An up-to-date Edmund Star and Planet Finder** (This item should be purchased at the campus bookstore IMMEDIATELY. You may also be able to purchase it from:

<https://www.scientificsonline.com/product/scientifics-famous-star-and-planet-locator>

3. **Solar Motion Demonstrator** (This item should be purchased at the campus bookstore IMMEDIATELY. They are not available online unless you buy a large multi-pack. You only need one.)



4. **Computer with the Mozilla FireFox browser installed** so that you can properly use ZOOM, CANVAS, and your Mastering Astronomy account on the internet.
5. **Webcam, microphone, computer** (for any online class session or work)
6. **Smartphone with photographic/video capability, or a document scanner** (for submitting work electronically)
7. **You must have a printout of the lecture notes, or simultaneous electronic access to the lecture notes as you follow along in lecture sessions.** (Lecture notes are available through [CANVAS](#) using the free CANVAS Student App for smartphones and tablet computers.)
8. **Calculator** (one with Scientific Notation and the basic trigonometric functions COS, SIN and TAN.)

NOTE: You should always have your calculator with you in this course.

9. **Plenty of paper, pencils, and erasers!**

IMPORTANT:

This course requires you to have a webcam and microphone. Some classes and assessments may be conducted using ZOOM, CANVAS, or other technology selected by your instructor which may use your computer's webcam or other technologies to communicate, monitor, and/or record classes, class activities, and assessments. **Be aware that video and audio recordings of class lectures will be part of the classroom activity. The video and audio recordings made by the instructor are for educational use/purposes and will only be made available to all students presently enrolled in the class. For purposes where the recordings will be used in future class session/lectures, any type of student identifying information will be adequately removed.** Assessments (e.g., tests) may also be conducted using proctoring software, which may listen to you, monitor your computer screen, view you and your surroundings, and record (including visual and audio recordings) all activity during the proctoring process. Please contact your instructor if you have any questions or concerns.

Attendance and In-Class Exercises:

Attendance is required. You will log your attendance daily by signing an attendance sheet that will be passed around each class. It is up to you to see that you have signed the attendance sheet to indicate your presence. **Poor attendance will have a negative impact on your final course grade.**

On occasion, as part of the lecture, the instructor may assign a short In-Class Exercise to be performed in class. These exercises are often 'pop' exercises and NOT announced ahead of time, but they WILL be graded. **By the end of the semester, these graded In-Class Exercises and your attendance in lectures will together make up 10% of your course grade.**

Because of the nature of these In-Class Exercises and their collaborative nature, YOU MUST BE PRESENT IN CLASS TO RECEIVE CREDIT ON IN-CLASS EXERCISES. There will be no opportunity for making up In-Class Exercises. Attendance is necessary for credit. To account for unavoidable absences due to illness, your six lowest in-class exercise/attendance grades will be dropped at the end of the semester. Use these drops wisely. Attend class and participate.

We may (on the rare occasion) use an assigned online discussion (using the CANVAS Discussion tool) to count as an In-Class Exercise. These will be assigned by the instructor as needed. If assigned, please respond to the prompts on CANVAS by the due date indicated. If you are unfamiliar

with CANVAS discussions, please view this brief video: "[Canvas: Student Discussions Overview](#)."

As far as what qualifies as 'participating in a discussion board' for credit, some examples are: 1) responding directly to a previous student's post; 2) posting an original question or comment regarding the discussion, homework problem, or assigned topic; 3) sharing a link or citation from a text or other source that contributes to discussion of the topic.

Make-Ups:

You should **NOT ASSUME** that you can make up anything in the course – most especially the **quizzes**. The quizzes are online in CANVAS, and you have about a week to complete them. So, do not procrastinate starting them. **Details for the rare test makeup are provided in the statement on Academic Integrity**. This is an important document provided later in this packet. **Be sure to read it carefully and in its entirety.**

Archiving:

I strongly advise you to keep backup copies of ALL materials submitted for grading so that you can re-submit them to your instructor at some point if it becomes necessary. The instructor cannot be held responsible for Acts of God or cyber gremlins. Saving your work will allow him to reconstruct your gradebook if disaster strikes.

Important: This is a conceptual astronomy course but does assume a working knowledge of very basic arithmetic, algebra, and geometry. If you know you have trouble with math, you should brush up on that NOW!

Homework Assignments: There will be two types of homework: Practice homework and graded homework. The practice homework is ungraded, but very important. **This semester, my plan is to keep track of the graded homework performance via the Mastering Astronomy homework assignment system. The graded homework assignments and out of class activities will be made as the course progresses.** The anticipated topic coverage and reading assignments are listed near the back of this syllabus. The course has a lot of flexibility as far as topic coverage, so, if the class has interest in a particular area, we may delve deeper into that topic and eliminate another topic from our plan.

The course syllabus, PowerPoint presentations, solutions to homework, quizzes and tests will be made available online as the semester moves along. Please check the solutions and answer keys made available online first before taking time in class to ask about a homework problem. Sometimes seeing a homework solution is all that is necessary to find out where you went wrong.

Strong effort in homework is extremely important in the course! We will go over some homework problems on occasion in lectures, but we will not have time to discuss them all. Of course, it is to your advantage to keep up to date on the reading and homework. Your combined graded homework score at the end of the semester will **count for 10% of your course grade. To account for 'everyday type' emergencies, I will drop your lowest THREE graded homework scores. Use these drops wisely.**

Quizzes/Tests and Final Examination: **There will be 5 quizzes, 2 mid-term tests, and a comprehensive final exam in the course.** The quizzes will be taken electronically through CANVAS. **The quizzes will each be worth 4% of your course grade. The tests will each be worth 15% of your course grade, and the final exam will be worth 25%.** The tests and final will occur live in the classroom.

Quizzes will have a day they are due but will not have a time limit. So, they are basically 'graded take-home quizzes'. The TESTS will be timed. You will be given roughly 50 minutes for each test. The final exam will be a 2-hour comprehensive exam given during finals week during the period and location assigned to us by the registrar.

The final exam will cover all course material. The tests may cover material learned in lectures, reading assignments, homework problems, quizzes, and other activities assigned in the course. This includes learning to use the Star and Planet Finder and the Solar Motion Demonstrator. The quiz and test format will likely always be multiple choice, but you should know the material and be prepared for any type of question. The instructor will discuss the general test taking rules and procedures as we get closer to the first exam date.

A Few Brief Comments/Policies About Lectures: It should be noted at this point that this is a *conceptual* astronomy course and therefore will lack the normal mathematical rigor of the discipline (to which some of you shout "hooray!"). At times, the course will include more *philosophical/religious* discussions, especially when discussing the origin of the universe. Also, for example, one discussion question posed may be: "Do you personally believe in a universe that is deterministic or probabilistic, and why?" This to help you integrate the material you are learning into your personal life.

The instructor may occasionally veer into topics/discussions that initially seem unrelated to astronomy to develop relevant analogies or to stimulate relevant thoughts about the science you are learning. This is appropriate for this type of science course and can be misunderstood if you are not expecting it. For example, to understand what an infinite range force really means, we may need to discuss some stories about how our lives interact and trickle outward towards others daily. This strategy is something your instructor believes can improve motivation toward the study of science, and based on past student evaluations of the course, most students appreciate these discussions. Analogies are important tools for learning science.

Expect to be challenged during some lectures to think about your beliefs and how well or how poorly they fit with what we know to be scientifically true about the universe. These brief parts of the course should be fun for you as you allow your mind to consider the possibilities.

All of this is consistent with the university's new general educational goal to help you develop the ability to synthesize knowledge across multiple domains, modes of inquiry, historical periods, and perspectives, as well as the ability to identify linkages between existing knowledge and new information. Students who engage in integrative thinking can transfer knowledge within and beyond their current contexts.

Grading:

Final grades in the course will (generally) be based on a comparison with the **highest score** in the class. At the end of the semester, the grades will be scaled so that the student with the highest grade at the end of the semester is pinned to be somewhere between 92% and 100% (usually), and everyone else is objectively scaled accordingly. Then the grades are assigned as follows:

100% - 92%	A	79.9% - 78%	C+
91.9% - 90%	A-	77.9% - 70%	C
89.9% - 88%	B+	69.9% - 60%	D
87.9% - 82%	B	59.9% - 0%	F
81.9% - 80%	B-		

Quizzes (5 each worth 4%)	20%
Tests (2 each worth 15%)	30%
POP In-Class Exercises and Attendance (Total)	10%
Graded Homework (Mastering Astronomy)	10%
Special Activities	5%
<u>Final Exam (During Finals Week)</u>	<u>25%</u>
TOTAL	100%

The instructor reserves the right to revise this grading system if he believes it is providing unfair or unreasonable grades. You must ultimately be competent in the course material and have regular attendance to pass.

Coronavirus and Flu Outbreaks:

For any health-related questions you can email the Director of the University Health Services, at uhsinfo@sa.psu.edu.

Be sure to read the university's most up to date official syllabus statements at the following website. These statements should be considered a part of THIS syllabus. The link is provided because the language is similar for all Penn State University courses:

<https://york.psu.edu/academics/support/academic-affairs/syllabus-statements>

Additionally, your professor, Kip Trout, has the following policies and reminders for you in this course. It is important that you understand these policies. Please ask Kip Trout questions about these policies if you need clarification.

MAKE-UPS and ACADEMIC INTEGRITY

Academic Integrity Statement and Policy for Kip Trout's Courses

A quick summary of the basic policy is as follows: Do not cheat; do not plagiarize; do not lie; do not take part in falsehoods or deceptions of any sort. If you think you may be doing something wrong, you probably are.

There will be many opportunities for help, and I am always striving to be fair to all students. Collaborations and discussions among students are strongly encouraged – at appropriate times – such as during In-Class Exercises and appropriate out of class experiences. However, I expect your best efforts to individually learn the material, and I expect honesty and academic integrity in all aspects of the course.

All Penn State University policies, Eberly College of Science policies, and University College policies regarding academic integrity/ academic dishonesty apply to this course and the students enrolled in this course. Each student in this course is expected to work entirely on her/his own while taking any exam, to complete assignments on her/his own effort without the assistance of others unless directed otherwise by the instructor, and to abide by University, Eberly College of Science, and University College policies about academic integrity and academic dishonesty.

As described in [The Penn State Principles](#), academic integrity is the basic guiding principle for all academic activity at Penn State University, allowing the pursuit of scholarly activity in an open, honest, and responsible manner. We expect that each student will practice integrity regarding all academic assignments and will not tolerate or engage in acts of falsification, misrepresentation, or deception.

Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, **but is not limited to**, cheating, plagiarizing, fabricating information, or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. To protect the fundamental ethical principles of the University community and the worth of work completed by others, we will record and report to the office of Judicial Affairs all instances of academic dishonesty. ([Faculty Senate Policy 49-20](#))

Students who are found to be dishonest will receive academic sanctions and will be reported to the University's Judicial Affairs office for possible further disciplinary sanction. Academic dishonesty can result in an assignment of "F" by the course instructor or "XF" by Judicial Affairs as the final grade for the student.

Make-Up Policy for Kip Trout's Courses

In general, I will not provide extensions on deadlines. I will not, in general, provide makeups (except possibly for exams).

Any missed work will receive a score of zero unless there are special circumstances that warrant an excuse (see below). These should be discussed with the professor on a case-by-case basis.

To help account for 'everyday-type' emergencies, during the semester I will drop your SIX lowest scores from the Attendance and In-Class Exercises grade, and at the end of the semester when calculating final graded homework average, I will drop your THREE lowest Graded Homework scores in Mastering Astronomy.

In the case of sudden or unexpected events (i.e., special circumstances) that will cause a student to miss an exam (or multiple graded assignments), students are required to notify the instructor prior to the exam/assignment due date or within 24-hours of the exam/assignment due date. The instructor MAY make an accommodation in this case if the reason provided qualifies as a special circumstance in the instructor's opinion. Otherwise, a grade of zero will default for the exam or assignments that were missed.

Students who are physically unable to take an exam at the regularly scheduled time (e.g., because of an illness or 'special circumstances') should NOT attempt to attend/take the regular exam, because once the examination is taken, its result is final. In this case the student should contact the instructor immediately to discuss a makeup.

Makeup exams will be scheduled separately and should be taken no later than three business days after being able to return to classwork. Students who do not take the make-up exam within the very reasonable time limit of one week from returning to classwork will receive a zero for the exam. Barring unusual emergencies, only one makeup opportunity is granted for each special circumstance accepted by the instructor.

As discussed above, if an emergency of any sort (i.e., special circumstance) is causing you to miss an exam (or multiple graded assignments), please contact the instructor immediately to discuss this. Excuses will be granted only for valid reasons, and the instructor may make phone calls or require follow-up documentation to ascertain the excuse is legitimate. Special circumstances are things such as:

1. Family emergencies. This includes a death in the immediate family, death of a close friend, sudden hospitalization of a close family member, recent mentally traumatic experiences, and events of similar gravity.
2. The student experiences the onset or flare-up of an incapacitating illness and/or injury.
3. A university-approved curricular or extra-curricular activity. In this case, a student needs to obtain a letter (or a class absence form) from the unit or department sponsoring the activity. The letter must indicate the anticipated absence date(s), and it must be submitted by email to the instructor.

Campus Closure and Delay Information:

In the event of a campus closure, course requirements, classes, deadlines, and grading schemes are sometimes adjusted. Information about course changes will be communicated to you in some reasonable manner by the instructor as soon as possible.

For notification about campus closures, please refer to Penn State York's website at <http://www.york.psu.edu>, call the weather hotline at 717.771.4079, or sign up for live text messages at PSUAlert (<https://psualert.psu.edu/psualert/>).

If there is any change in the regular class schedule or the final exam schedule, an alert will be posted to on the campus website and sent via [PSUAlert](#).

The campus weather policy is very simple:

In the event of a snow '**delay**' or weather '**delay**', you likely STILL have class at the same time. **ONLY CLASSES BEFORE 10:00 am are canceled by weather delays.**

In the event of a campus '**closing**', then **NO classes will meet, not even via ZOOM.**

WARNING: PLEASE DO NOT CALL THE CAMPUS PHONE NUMBER TO ASK WHAT TIME YOUR CLASSES MEET WHEN WE HAVE A WEATHER DELAY! It bogs down the phone line and restricts communications that are necessary and important. Be sure you know PSU York's weather-related information BEFORE it happens. Store the information in your phone (or SOMEwhere) so that you have it handy!

Some Dates of Interest: Aug. 14 – Sep. 5, 2023: Apply for Graduation activation period
Sat. Aug. 26: Regular Drop Deadline
Sun. Aug. 27: Regular Add Deadline
Mon. Sep. 4: NO CLASSES – Labor Day
Fri. Nov. 10: Late Drop Deadline
Nov. 19 - 25: NO CLASSES – Thanksgiving Break
Fri. Dec. 8: Last Day of Classes
Dec. 11 - 15: Final Exams

Syllabus subject to change: I anticipate that we will follow the schedule I have outlined here, but I may adjust it based upon what happens this semester. Be sure to check with a classmate after an absence to see if assignments have changed. I may also change the basis for the course grade. If I do so, I will communicate this in a reasonable method.

Remaining in the course after reading this syllabus (which is a requirement of the course) signals that you accept the possibility of changes in the course policies and responsibility for being aware of them.

Suggestions From Your Instructor:

To do well in this astronomy class you must be very good at all the following:

- 1.) Basic math
- 2.) Logic (i.e., problem solving)
- 3.) Concentration
- 4.) Reading Skills
- 5.) Astronomy

A weakness in any of these areas will cause you to struggle in this astronomy class.

If you find yourself struggling on the course, try to narrow in on what is giving you the trouble. A chain is only as strong as its weakest link.

You will find that your astronomy class is much easier when you become strong in the first four categories listed above.

The most important thing you should do is practice, practice, practice! And then, practice some more!

Purpose of Course Parts

Lecture Notes: These are your main guide for the course. Many test questions will check your understanding of the material that was mentioned in lecture.

Reading From Textbook in Mastering Astronomy: This is meant to "fill the gaps" in the lecture notes and to provide you further insight into the material. Example questions/problems are shown and demonstrated in the text. Material learned in reading is important!

Homework Problems: This is perhaps the most important part of the course. The homework is to help you sincerely practice the course material and become masters of the information you are learning.

NOTE: Many of your test questions will be like (but not usually the same as!) the homework. It is not enough to memorize and spit answers back like you did in high school. You must learn the material well enough to be able to APPLY IT TO NEW PROBLEMS ON THE FLY.

ALWAYS do your best! All hard work returns a profit - - - of some sort - - - eventually.

Astronomy 001
Fall 2023

The following outline lists the tentative topics and reading assignments for this semester. The topics are not listed by week or class, but rather are listed in a tentative order of progression. Practice homework is listed. GRADED HOMEWORK will be assigned as the course progresses in your Pearson's Mastering Astronomy account.

TOPIC	READING	PRACTICE HOMEWORK
1 Ch. 0 Charting the Heavens	All (0.1 - 0.5)	Self-Test; R&D: 2-10; 12-14; Prob: 7
2 Ch. 1 The Copernican Revolution	All (1.1 - 1.4)	Self-Test; R&D: 2, 3, 5, 7, 11, 15; Prob: 5-6
3 Ch. 2 Light and Matter	All (2.1 - 2.8)	Self-Test; R&D: 1-2, 4-6, 8-12, 14-15; Prob: 1-2, 4-5, 7, 9
4 Ch. 3 Telescopes	All (3.1 - 3.5)	Self-Test; R&D: 1, 3-7, 9, 14; Prob: 3-4
5 Ch. 4 The Solar System	All (4.1 - 4.4)	Self-Test; R&D: 1-5, 7-8, 14; Prob: 3, 9
6 Ch. 5 Earth and Its Moon; Highlights of Apollo	5.1-5.3; 5.6-5.8	R&D: 1-2, 5, 11-15
7 Ch. 6 The Terrestrial Planets Ch. 7 The Jovian Planets Ch. 8 Moons, Rings, and Pluto	All (6.1 - 6.8) All (7.1 - 7.6) 8.1-8.2; 8.4-8.5	Ch:6 - Self-Test; R&D: 1, 5, 10 Ch:7 - Self-Test; R&D: 1-4; 13; Prob: 1 Ch:8 – Self-Test; R&D: 1, 3, 5, 8, 15; Prob: 1, 7, 8
8 Ch. 10 Measuring the Stars	All (10.1 - 10.7)	Self-Test; R&D: 1, 4-7, 9, 12-14; Prob: 8
9 Ch. 9 The Sun Ch. 11 The Interstellar Medium	9.4-9.5 All (11.1 - 11.6)	Ch.9 - R&D: 11-13 Ch.11 - Self-Test; R&D: 1, 4, 7, 10, 14-15
10 Ch. 12 Stellar Evolution Ch. 13 Neutron Stars and Black Holes; Relativity Ch. 14 The Milky Way Ch. 15 Normal and Active Galaxies	All (12.1 - 12.7); 13.1-13.2; 13.5-13.6; 13.8 All (14.1 - 14.7) 15.1; 15.3	Ch.12 - Self-Test; R&D: 1, 3-9 Ch.13 -R&D: 2-3, 8-10, 13; Prob: 1, 7
11 Ch. 17 Cosmology	17.1-17.5	Ch.17 - R&D: 4-6; 8-11; 15
12 Ch. 18 Life in the Universe	All (18.1 - 18.4)	Self-Test; R&D: 2-3; 5, 7-8; 11-12; 15
<p>Quiz 1 – Due: Wednesday, 9/13/23 Quiz 2 – Due: Wednesday, 9/27/23 TEST 1 – Monday, 10/02/2023 Quiz 3 – Due: Wednesday, 10/18/23 TEST 2 – Monday 11/06/2023 Quiz 4 – Due: Friday, 11/17/23 Quiz 5 – Due: Wednesday, 12/06/23 FINAL EXAM – Finals Week</p>		

Getting Started with CANVAS and Pearson's Mastering Astronomy

Penn State uses a Course Management System called CANVAS. This is the place where many of your faculty members will store their syllabi, course materials, and sometimes quizzes, discussions, and places to turn in homework electronically. You can also see your course grades in Canvas if a faculty member chooses to use the gradebook. Your faculty members will tell you where to go to access your course materials - either on Canvas, or simply in class.

Communication in Canvas

Many times, faculty will also use the built-in communication tools like Canvas Inbox (mail tool) or announcements to keep you up to date. These are different from your official PSU email (webmail.psu.edu). Your faculty members will tell you how they prefer you to communicate with them. Just ask if you are not sure.

If you need technical help using Canvas

PSU has purchased a very robust help system for you. First, log-in to Canvas by clicking on the sign-in to Canvas button at

<https://lmstools.ais.psu.edu/login/index.html>.

Then in the bottom left corner of the Canvas screen, you will see a "?" Help icon. Click on the "?" and your help options will appear in a pop-up box - everything from chat, to phone, to guides, to email support. Please use the help options, they are great!! You can also look things up yourself in the Student Guide (one of the help options above!) available at <https://community.canvaslms.com/docs/DOC-4121>

Setting up Notifications

Canvas has very powerful notification settings that you can use to get updates via email or text message on things like announcements, grade postings, messages, and calendar changes. However, these all depend on how your faculty member decides to use Canvas. If they are not using the announcement feature, for example, then obviously, you won't get a text message with those kinds of updates. The most important thing to remember is to talk to your faculty members (usually posted in the syllabus) about how they want you to communicate with them and which features they decide to use. To read more about notification settings, go to <https://community.canvaslms.com/docs/DOC-1286>

Canvas App

Lastly, Canvas has an app that you can install on iPads, Android tablets, and phones. You can download these from the app store on your device. Use technical support if you have questions.

Mastering Astronomy

Establish your understanding of how to get into CANVAS and familiarize yourself with the course material available there. Then click on the **Mastering Astronomy** link along the left side menu in our CANVAS course and follow the instructions on the next page to set up Mastering Astronomy. **YOU MUST SETUP Mastering Astronomy to be properly registered in this course and to do the graded homework!**

Student Registration Instructions

To register for **Astronomy 001 - Penn State York - Fall 2023 - Trout**:

1. Go to <https://mlm.pearson.com/enrollment/trout13228>
2. Sign in with your Pearson student account or create your account.
For Instructors creating a Student account, do not use your instructor credentials.
3. Select any available access option, if asked.
 - » Enter a prepaid access code that came with your textbook or from the bookstore.
 - » Buy instant access using a credit card or PayPal.
 - » Select **Get temporary access without payment for 14 days**.
4. Select **Go to my course**.
5. Select **Astronomy 001 - Penn State York - Fall 2023 - Trout** from My Courses.

If you contact Pearson Support, give them the course ID: trout13228

To sign in later:

1. Go to <https://mlm.pearson.com>
2. Sign in with the same Pearson account you used before.
3. Select **Astronomy 001 - Penn State York - Fall 2023 - Trout** from My Courses.