

Pittsburg State University
PHYS 175-01 Descriptive Astronomy
Fall 2018
MWF, 1:00-1:50, 102 YH

Instructor: Kyla Scarborough Office: 304 Yates Hall
Text: *Discovering the Universe*, Comins & Kaufmann, 10th edition Phone: 620-235-4292
w/Launch Pad access card ISBN: 9781464197406 Office Hours: See below
Launch Pad: <http://www.macmillanhighered.com/launchpad/dtu10e/8502178>

e-mail: kscarborough@pittstate.edu or k.scarborough@gmail.com

No Canvas messages

This on campus face-to-face lecture course counts toward the requirements in General Education for your degree program. General Education is an important part of your educational program at Pittsburg State University and has been designed to implement the following philosophy:

Philosophy of General Education: General education is the study of humans in their global setting. The general education curriculum, therefore, acts as the heart of a university education by developing the capacities that typify the educated person and providing a basis for life-long learning and intellectual, ethical, and aesthetic fulfillment. General education examines the world around us and fosters an understanding of our interactions with the world and our place in the universe. General education celebrates the creative capacities of humankind and helps to preserve and transmit to future generations the values, knowledge, wisdom, and sense of history that are our common heritage.

This course will help you accomplish several of the Goals and Objectives of General Education including the development of your ability to use the tools of mathematics to communicate and to formulate and solve problems, the development of your critical thinking skills, and the development of your knowledge as to how the physical sciences have affected society, its institutions, and the world as a whole.

This course will provide a survey of the major areas of modern astronomy including solar, planetary, stellar, and galactic astronomy as well as cosmology. No background beyond high school algebra and general science is necessary. The course lectures may be supplemented by trips to the planetarium and videos. Below is the relative order of topic discussions.

Astronomy Basics

Chapter 1 Constellations, Earthly motions, Lunar cycles, Eclipses
Chapter 2 History of Astronomy, Kepler's Laws, Newton's Laws, Gravitation.
Chapters 3 & 4 Visible Light, Telescopes, other Electromagnetic Radiation

Exam 1 (Chapters 1 - 4)

The Solar System

Chapter 5 Formation of the Solar System
Chapter 6 Earth and Moon
Chapter 7 Terrestrial Planets
Chapter 8 Outer Planets
Chapter 9 Solar System Vagabonds: Comets, Asteroids, Meteors

Exam 2 (Chapters 5 - 9)

The Stars

Chapter 10 Our Sun
Chapter 11 Characterizing Stars
Chapter 12 Stellar Evolution
Chapter 13 Deaths of Stars
Chapter 14 Black Holes

Exam 3 (Chapters 10 – 14)

The Universe

Chapter 15 Milky Way Galaxy
Chapter 16 Galaxies
Chapter 17 Quasars, Active Galaxies, other Ultrahigh Energy Sources
Chapter 18 Cosmology
Chapter 19 Searching for Extraterrestrial Life

Friday December 14th, 1:00-2:50 **Final Exam (Chapters 15-19), plus some comprehensive material.**

Grading

Grades will be calculated from the scores of 3 unit tests, the final exam, online quizzes, and homework assignments. Some material over which you will be tested might not be discussed in class, but will be based upon material in the textbook, from the videos that we will watch, from homework assignments, and from the planetarium sessions.

Homework: There will be homework to be turned at the beginning of some class periods. **Homework submitted later than ten minutes after class begins on the due date will be considered late and will not be accepted.** If you are ill on a due date, then please submit your homework assignment via **e-mail by the due time. Illegible homework will not be graded. Homework problems and exams must be completed in pencil. Numerical problems must include the equation(s) used to solve the problems, all steps/work toward obtaining solutions, proper units for all properties in the equations, and obvious solutions (circled or boxed in). Homework solutions must not be identical to those of another student or to the text.**

Quizzes submitted after the due time on the due date will be considered late and will not be accepted. There are no make-up quizzes.

The grading system for this course is as follows:

<u>Component</u>	<u>Weight</u>	<u>Percentage</u>	<u>Grade</u>
Tests (4)	80%	90 – 100 %	A
Online Quizzes & Homework	20%	78 – 89	B
		66 – 77	C
		54 – 65	D
		below 54	F

You can find out what your current grade for the course is by doing the following.

1. Add the quiz and homework points that you have earned and the points that you have earned for extra credit activities.
2. Divide this sum by the total possible quiz and homework points at this time.
3. Multiply that quotient by 20. Save this number.
4. Add the exam points that you have earned.
5. Divide this sum by the total possible exam points at this time.
6. Multiply that quotient by 80. Save this number.
7. Add the numbers saved in steps 3 and 6.

Attendance is mandatory and checks will be taken on a random basis. Three or more unexcused absences will result in your dismissal from the course.

Students who know that they are going to be out of town on unit exam dates should make arrangements to take unit exams **prior** to those dates. **Excused missed unit exams must be made up within six calendar days.**

Do not make travel plans that will cause you to miss the final exam. You must take the final exam on the day, and at the time, scheduled by the Registrar. As it states in the University Catalog, “Final examinations will be given according to the schedule of examinations distributed by the Registrar each semester.” The only exception is “for students who have three or more final exams **officially scheduled for a single day.”**

You will need a calculator for this class. No cell phone calculators will be allowed. No devices other than a calculator, a pencil, and an eraser will be allowed during exams. Calculators will not be allowed during some exams. I will provide the Scantrons for all exams.

Laptops, tablets, and cell phones may not be used during class.

Read your text!

Learning Curve Quizzes: <http://www.macmillanhighered.com/launchpad/dtu10e/8502178>

▶ Chapter 1. Discovering the Night Sky	Aug 31 To Do
▶ Chapter 2. Gravitation and the Motion of the Planets	Sep 07 To Do
▶ Chapter 3. Light and Telescopes	Sep 12 To Do
▶ Chapter 4. Atomic Physics and Spectra	Sep 17 To Do
▶ Chapter 5. Formation of the Solar System and Other Planetary Systems	Sep 21 To Do
▶ Chapter 6. Earth and the Moon	Sep 26 To Do
▶ Chapter 7. The Other Terrestrial Planets	Oct 01 To Do
▶ Chapter 8. The Outer Planets	Oct 08 To Do
▶ Chapter 9. Vagabonds of the Solar System	Oct 15 To Do
▶ Chapter 10. The Sun: Our Extraordinary Ordinary Star	Oct 19 To Do
▶ Chapter 11. Characterizing Stars	Oct 24 To Do
▶ Chapter 12. The Lives of Stars from Birth Through Middle Age	Oct 26 To Do
▶ Chapter 13. The Deaths of Stars	Nov 02 To Do
▶ Chapter 14. Black Holes: Matters of Gravity	Nov 07 To Do
▶ Chapter 15. The Milky Way Galaxy	Nov 12 To Do
▶ Chapter 16. Galaxies	Nov 16 To Do
▶ Chapter 17. Quasars and Other Active Galaxies	Nov 19 To Do
▶ Chapter 18. Cosmology	Nov 26 To Do
▶ Chapter 19. Astrobiology	Nov 30 To Do

ACADEMIC INTEGRITY POLICY

Academic dishonesty by a student is defined as unethical activity associated with course work or grades.

It includes, but is not limited to:

- (a) Giving or receiving unauthorized aid on examinations.
- (b) Giving or receiving unauthorized aid in the preparation of notebooks, themes, reports, papers or any other assignments.
- (c) Submitting the same work for more than one course without the instructor's permission, and,
- (d) Plagiarism. Plagiarism is defined as using ideas or writings of another and claiming them as one's own. Copying any material directly (be it the work of other students, professors, or colleagues) or copying information from print or electronic sources (including the internet) without explicitly acknowledging the true source of the material is plagiarism.

Plagiarism also includes paraphrasing other individuals' ideas or concepts without acknowledging their work, or contribution. To avoid charges of plagiarism, students should follow the citation directions provided by the instructor and/or department in which the class is offered.

The above guidelines do not preclude group study for exams, sharing of sources for research projects, or students discussing their ideas with other members of the class unless explicitly prohibited by the instructor.

Since the violation of academic honesty strikes at the heart of the education process, it is subject to the severest sanctions, up to and including receiving an "F" or "XF" (an "XF" indicates that "F" was the result of academic dishonest) for the entire class and dismissal from the university.

Office Hours

Tentative Office Schedule~Kyla Scarborough Fall 2018

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-9:50	Lunch	Lunch	Lunch	Lunch	Lunch
10:00-10:50	Physical Science	Astro Lab Set-up	Physical Science	Office Hours	Physical Science
11:00-11:50	Office Hours	Office Hours	Office Hours	Office Hours	Office Hours
12:00-12:50	Astro Lab Set-up	PS Lab		PS Lab	Faculty Meeting
1:00-1:50	Descriptive Astronomy	PS Lab	Descriptive Astronomy	PS Lab	Descriptive Astronomy
2:00-2:50	Astro. Lab	Astro. Lab	Astro. Lab	Astro. Lab	PS Lab Set-up
3:00-3:50	Astro. Lab	Astro. Lab	Astro. Lab	Astro. Lab	PS Lab Set-up

Goals of General Education

General Education plays a pivotal role at Pittsburg State University. As a key component of undergraduate education, it furthers the University's mission of "providing programs and services that create opportunities for students to develop intellectually, ethically, aesthetically, emotionally, socially and physically." The overall purpose of the General Education program is to provide an environment in which students can acquire the basic knowledge and skills common to educated people in our global society. To do this, the program provides instruction in certain basic disciplines ranging from the arts to science and technology. But it does more. It stimulates critical thinking and encourages decision-making free from prejudice or insularity. It develops the ability to communicate effectively via a variety of means. The program promotes ethical and aesthetic growth. It cultivates an appreciation of different cultures and the rights of others. In short, the foundation provided by General Education helps Pittsburg State University graduates lead satisfying lives and function responsibly in a complex and ever-changing world. And above all, the program provides a basis for future growth.

Goals of General Education for this Course are in violet type below.

Goal #1: Students should be able to communicate effectively.

OBJECTIVES:

Demonstrate the ability to formulate and solve problems using the tools of mathematics.

Goal #2: Students should be able to think critically.

OBJECTIVES:

Demonstrate the ability to distinguish between relevant and irrelevant information in problem solving.

Articulate a problem and develop a logical and reasonable response to it using appropriate sources.

Apply generalizations, principles, theories, or rules to the real world.

Demonstrate the ability to analyze and synthesize information.

Goal #3: Students should be able to function responsibly in the world in which they live.

OBJECTIVES:

Part I: Sciences

Demonstrate an understanding of the basic principles, facts, and theories of the biological and physical sciences.

Demonstrate an understanding of the basic methods of inquiry, analysis and description in the biological and physical sciences.

Demonstrate and understanding of how the natural sciences contribute to the general welfare of civilization.

Part II: Social Studies

Evaluate the impact of scientific, technological, economic, and intellectual change on social and political institutions.

Anticipated learning outcomes for each chapter:

1 Discovering the Night Sky

Learning Outcomes

At the end of this chapter, the student should be able to

1. Explain the importance of distance measurements in astronomy.
2. Describe the nature and use of constellations.
3. Identify the elements of the equatorial coordinate system on the celestial sphere.
4. Define two solstices and two equinoxes.
5. Explain the orientation of the ecliptic on the celestial sphere and how it produces seasons on the Earth.
6. Describe the daily and yearly motions of the Earth.
7. Describe what precession is, what effect it has on our observations of stars, and why it occurs.
8. Draw a diagram explaining how lunar phases are controlled by the relative positions of the Sun and the Moon.
9. Explain when and why solar and lunar eclipses occur and why there are not such eclipses every month.

2 Gravitation and the Waltz of the Planets

Learning Outcomes

At the end of this chapter, the student should be able to

1. Compare and contrast the Ptolemaic and Copernican cosmologies by explaining a variety of naked-eye observations.
2. Know Kepler's three laws of planetary motion and describe the observational consequences of each.
3. List Galileo's telescopic observations and explain the success or failure of Ptolemaic and Copernican models in accounting for them.
4. State and identify examples of Newton's three laws of motion.

3 Light and Telescopes

Learning Outcomes

At the end of this chapter, the student should be able to

1. List the major regions of the electromagnetic spectrum in order of wavelength and give common examples of each.
2. List the colors of the visible spectrum in order of wavelength, frequency, and photon energy.
3. Name the two main classes of telescopes and describe the physical laws that each uses to form images.
4. Describe how the focal length and diameter of a telescope influence its angular resolution, light-gathering power, and magnifying power.
5. Compare the merits and deficiencies of the two major classes of telescopes.
6. Discuss the similarities and differences of radio telescopes and optical telescopes
7. List the advantages of orbiting telescopes over Earth-bound telescopes in detecting electromagnetic radiation in each of the major spectral regions.

4 Atomic Physics and Spectra

Learning Outcomes

At the end of this chapter, the student should be able to

1. Identify the Stefan-Boltzmann law and Wien's law and explain their meaning in the context of blackbody radiation and temperature determination.
2. Describe the evidence for the particle nature of light and indicate how the energy per photon is related to the wavelength and frequency in the wave model.
3. State Kirchoff's three laws of spectral analysis and indicate what information is derived about the nature of the light source in each case.
4. Describe the Bohr model of the atom in terms of its constituents and their distribution and explain how spectral lines can be produced.
5. Describe how spectroscopic analysis provides information about the chemical composition of celestial objects.
6. Indicate how the numbers of protons, neutrons, and electrons are used to define elements, ions, and isotopes.
7. Describe the origin of line series in the hydrogen atom.
8. Describe how the Doppler shift reveals the radial motion of star.

5 Formation of the Solar System and Other Planetary Systems

Learning Outcomes

At the end of this chapter, the student should be able to

1. List the most abundant elements in the solar system and indicate the likely origin of each.
2. Describe the major stages in the formation of the solar system and how it evolved to its current state.
3. Explain how the differences between the inner and the outer planets have resulted despite their common origin.
4. Compare and contrast the general physical characteristics of the planets.

6 Earth and Moon

Learning Outcomes

At the end of this chapter, the student should be able to

1. Describe the chemical evolution of the Earth's atmosphere.
2. Describe the basic characteristics of plate tectonics on the Earth, including the observational evidence.
3. List the major divisions of the Earth's interior and describe the chemical composition and relative physical conditions in each.
4. Describe the relationship of the Van Allen belts and the northern lights to the Earth's magnetic field.
5. List the various layers in the Earth's atmosphere and describe the physical characteristics by which they differ.
6. Describe the effect of increasing carbon dioxide in the Earth's atmosphere on the average global atmospheric temperature.
7. Describe the key elements of the collision-ejection theory and summarize the evidence that might support it.

7 The Other Terrestrial Planets

Learning Outcomes

At the end of this chapter, the student should be able to:

1. Compare and contrast the atmospheres of the terrestrial planets in terms of temperature, pressure, and chemical composition.
2. List the properties that Mercury has in common with the other terrestrial planets and with the Moon.
3. Compare and contrast the surfaces of Mercury, Mars, and Venus with that of the Earth in terms of geologic structures and evidence regarding tectonic activity.
4. Describe plausible explanations for the absence of water vapor in the Venusian and Martian atmospheres.
5. Discuss the contributions of the various spacecraft missions to our understanding of the terrestrial planets.
6. Discuss the evidence for the existence of water on Mars's surface in the past and the location and form of that water today.
7. Compare the magnetic fields of Mercury, Venus, and Mars with that of Earth.
8. Describe the surface features of Mars revealed by recent missions.

8 The Outer Planets

Learning Outcomes

At the end of this chapter, the student should be able to

1. Name and describe the visible features in the Jovian atmosphere.
2. Sketch and label the major elements of the ring system of Saturn and describe its composition.
3. Compare and contrast the internal structure of Jupiter and Saturn with that of Uranus and Neptune.
4. Compare and contrast the ring systems of the outer planets.
5. Describe the geologic activity observed on Io.
6. Compare and contrast the inner and outer Galilean satellites in terms of internal structure and surface features.
7. List the gases that compose Titan's atmosphere and discuss the possibility of the existence of life forms there.
8. Discuss recent probes to the Jovian planets such as Cassini.

9 Vagabonds of the Solar System

Learning Outcomes

At the end of this chapter, the student should be able to

1. Sketch the location of the asteroid belt in the solar system and explain the nature and origin of the Kirkwood gaps.
2. Describe the relationships among meteoroids, meteorites, meteors, and meteor showers.
3. List the principal classes of meteorites; compare and contrast their compositions.
4. Compare and contrast dwarf planets, asteroids, meteoroids, and comets in terms of orbital characteristics, chemical composition, size, and structure.

10 The Sun: Our Extraordinary, Ordinary Star

Learning Outcomes

At the end of this chapter, the student should be able to

1. Name the three layers of the solar atmosphere and know the relative temperatures in each.
2. Describe flares, spicules, granules, prominences, and sunspots and identify the layer in the solar atmosphere in which each is found.
3. Indicate what is observed in helioseismology and explain its value in investigating the Sun.
4. Explain the nuclear fusion process that is the principal energy source in the solar interior and describe the physical conditions required for this process.
5. State and explain the equilibrium conditions that are assumed to prevail in the solar interior.
6. List and describe the two primary mechanisms for energy transport in stellar interiors and indicate in which regions of the solar interior, if any, each is dominant.
7. Explain how the detection of solar neutrinos provides a probe of the Sun's core and how the current rate of solar neutrino detection implies that current understanding either of neutrinos or of solar structure may be incomplete.

11 Characterizing Stars

Learning Outcomes

At the end of this chapter, the student should be able to

1. Describe the magnitude system and how a light source's brightness changes with distance.
2. Describe the observations necessary for the determination of basic physical properties of stars, such as mass, temperature, luminosity, chemical composition, sizes, and motions.
3. Explain the classification of stars according to their spectra and their luminosity.
4. Draw and describe the H-R diagram and its usefulness for displaying physical properties of stars and in expanding our knowledge about stellar sizes and distances.
5. Describe the mass-luminosity relation and specify limitations on its applicability.
6. Explain the characteristics of the radial velocity curves for binary stars.
7. Describe the differences between the light curves for total and partial eclipsing binary stars.

12 The Lives of Stars from Birth Through Middle Age

Learning Outcomes

At the end of this chapter, the student should be able to

1. Describe the physical properties and visual appearances of objects associated with pre-main sequence stellar evolution.
2. Identify the defining characteristic of main-sequence stars and compare the relative lifetimes on the main sequence for stars of different mass.
3. List the names of nuclear fusion reactions and indicate the classes of stars in which each reaction is thought to be active.
4. Identify the physical property normally thought to control the life cycles of stars and planets.
5. Explain how observations of open and globular star clusters contribute to the testing and extension of current theoretical models for stellar evolution.
6. Contrast the properties of stars belonging to the two primary stellar populations.
7. Compare and contrast RR Lyrae and Cepheid variable stars in terms of period, population membership, luminosity, and evolutionary status.

13 The Deaths of Stars

Learning Outcomes

At the end of this chapter, the student should be able to

1. List the stages in the evolution of low-mass stars beyond the helium flash.
2. List the stages in the evolution of high-mass stars beyond the initial red giant or supergiant stage.
3. Name the objects that represent the end phases of evolution for main-sequence stars and indicate the mass range for each.
4. Compare and contrast the physical and observable properties of Type I and Type II supernovae.
5. Describe the properties of gas clouds that are produced by late stages of stellar evolution and indicate from which type of stars they are formed.
6. Review the observational evidence that links pulsars with neutron stars.
7. Compare and contrast the physical processes that occur in supernovae with those in novae.

14 Black Holes: Matters of Gravity

Learning Outcomes

At the end of this chapter, the student should be able to

1. Provide brief descriptions of the special and general theories of relativity.
2. List the principal features used to describe black holes and explain the significance of each.
3. List the three properties that completely characterize a black hole.
4. Describe how energy can be extracted from certain types of black holes and indicate what property a black hole must have to allow such extraction.
5. Discuss the evidence that suggests that black holes exist in binary systems and briefly describe how searches for such objects are conducted.

15 The Milky Way Galaxy

Learning Outcomes

At the end of this chapter, the student should be able to

1. List the contributions of Leavitt, Shapley, and Hubble to astronomy.
2. Discuss the importance of Cepheids in finding extragalactic distances.
3. Describe the history of events leading to the present understanding of the basic structure of the universe.
4. Indicate the approximate dimensions of the components of the Milky Way.
5. Describe the galactic distribution of general interstellar material, nebulae, and open and globular star clusters.
6. Discuss the observations used to establish the rotation curve of the Galaxy and its value in probing the structure of the Milky Way.
8. Discuss the “missing mass” problem.
9. Explain how we know there is a supermassive black hole at the center of the Milky Way.

16 Galaxies

Learning Outcomes

At the end of this chapter, the student should be able to:

1. Describe the principal Hubble classes for galaxies, and mention the criteria for the assignment of subclasses.
2. Discuss the differences between flocculent spirals and grand-design spirals
3. Explain what spiral arms are and how they are sustained.
4. Compare and contrast the contents of the various Hubble classes of galaxies.
5. Explain the observational basis for the dark matter problem in spiral galaxies and in clusters of galaxies.
7. Discuss the role of collisions and mergers in our understanding of galaxies.
8. State the Hubble law and describe how the Hubble constant is evaluated and how it is used to determine the distances of galaxies.

17 Quasars and Other Active Galaxies

Learning Outcomes

At the end of this chapter, the student should be able to

1. Describe the observable properties of quasars and indicate how they are identified.
2. Explain why intrinsic properties of quasars are so difficult to explain.
3. List the various types of active galaxies and discuss how each might be related to quasars.
4. Discuss the observations that seem to be consistent with the presence of supermassive black holes in most galaxies.

18 Cosmology

Learning Outcomes

At the end of this chapter, the student should be able to:

1. Describe the evidence that suggests that the universe is expanding
2. Explain the origin of the Hubble law and the cosmic microwave background radiation in the Big Bang theory of cosmology. (Homework question, exam multiple choice)
3. Discuss the effect of the mean density of the universe on its future, its rate of expansion with time, and its shape or geometry. (Homework question, exam multiple choice)
4. Contrast the meaning of the expanding universe theories with inflationary universe theories and explain the isotropy and flatness problems in the context of the inflationary models. (Homework question, exam multiple choice)
5. Describe what antimatter is and how it is affected by the presence of matter. (Homework question, exam multiple choice)
6. List the four basic forces in nature and review the progress made to date in attempts to unify these forces. (Homework question, exam multiple choice, classroom discussion)

19 Astrobiology

Learning Outcomes

At the end of this chapter, the student should be able to:

1. Explain how astronomers search for extraterrestrial life.
2. Discuss the Drake Equation and make estimates for the various factors in it.
3. Explain why radio telescopes are used in the search for extraterrestrial signals.
4. Outline the results to date of the SETI program.

Pittsburg State University

Syllabus Supplement – Fall 2018

IMPORTANT DATES

8/20.....	Classes begin
8/27.....	Tuition due
8/27.....	Last day for full tuition refund
8/27.....	Last day to add classes w/o permission of instructor
9/3.....	Labor Day Holiday
9/4.....	Final day to drop w/o transcript notation
9/26.....	Last day for half refund
10/11-10/12.....	Fail Break
10/15.....	Mid-term D and F grades available after 5:00 pm
11/5.....	Final day to drop a course unless withdrawing from all classes
11/21.....	Thanksgiving Holiday begins
11/29.....	Last day to withdraw from all classes
12/10.....	Finals week through 12/14
12/14.....	Deadline to remove/extend IN grades for 2018 SP and SU semester
12/17.....	Grades due from faculty

DROPPING A COURSE OR WITHDRAWING FOR THE SEMESTER

Beginning the 12th week through the 16th week of full-term courses, individual courses cannot be dropped.

A student who does not officially withdraw from a course or from the university will be assigned an "F" grade in the course or courses concerned. These "F" grades will be included in the computation of the GPA.

The dates for dropping courses that run fewer than sixteen weeks are proportionate to the length of the course (e.g. the last day to drop an eight week course would be the end of the sixth week). Consult your instructor or the Registrar's Office for questions about a specific course. For students who wish to withdraw from all classes after the 12th week of the term, the instructor must assign a grade of W or F.

To drop a course after the 5th day of class or for clarification on drop/add policies, contact the Registrar's Office, 103 Russ Hall, 620-235-4200 or registrar@pittstate.edu

IMPORTANT INFORMATION FOR STUDENTS RECEIVING FINANCIAL ASSISTANCE

Student aid is available each semester for students who qualify. Please contact the Office of Student Financial Assistance for any questions at 620-235-4240 or by email at fnaid@pittstate.edu.

The Office of Student Financial Assistance is required to recalculate financial aid eligibility for students who withdraw, stop attending or are dismissed prior to completing 60 percent of a semester. This calculation applies to students receiving the following Title IV funds including:

Federal Pell Grant	Federal Parent PLUS Loan
Federal Direct Loan	Federal TEACH Grant for education majors

Federal financial aid is returned to the federal government based on the percent of unearned aid disbursed toward institutional charges for tuition, fees, and on-campus room and board. Students may be required to repay a portion of the aid funds received.

When aid is returned, the student may owe a balance to the University and/or Department of Education Title IV Programs. Please contact Student Financial Aid if you are considering dropping hours during the semester, to see how you will be affected.

IMPORTANT INFORMATION FOR INTERNATIONAL STUDENTS

International students studying on F or J visas must be in proper immigration status and are required to always be in full time enrollment (minimum 12 hours undergraduate or 9 hours graduate). For additional information <https://www.pittstate.edu/international/immigration.html>

CLASS ATTENDANCE POLICY

Students at Pittsburg State University are expected to attend class regularly and participate fully in class activities. It is the responsibility of the course instructor to set the attendance policy for his or her courses and communicate that policy to students in the course syllabus. The syllabus should address whether and how attendance affects the course grade, the issue of excused absences, and whether students will be dropped for nonattendance or excessive absence.

Students who have not attended or who have been excessively absent from a class may be dropped from the course by the instructor. In such instances, this policy must be clearly stated in the syllabus and uniformly enforced. Students may be dropped at anytime in the semester based on course policy. Instructor drops after the beginning of the 12th week of a full semester class will result in a grade of "F" for the course.

Regardless of the faculty prerogative to drop a student for nonattendance or excessive absence, the ultimate responsibility for monitoring and maintaining up-to-date course enrollment rests with the student.

SEVERE WEATHER INFORMATION

If forecasts or weather conditions suggest that travel in the area could become hazardous a policy is in place to determine if classes or other University activities will be cancelled. This policy and notification process can be found at <https://www.pittstate.edu/police/safety.html#undefined5>. Notification methods typically include the PSU website, local news media, and text messaging for those who subscribe to this service.

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It includes, but is not limited to:

- Giving or receiving unauthorized aid on examinations.
- Giving or receiving unauthorized aid in the preparation of notebooks, themes, reports, papers or any other assignments.
- Submitting the same work for more than one course without the instructor's permission, and,
- Plagiarism. Plagiarism is defined as using ideas or writings of another and claiming them as one's own. Copying any material directly (be it the work of other students, professors, or colleagues) or copying information from print or electronic sources (including the internet) without explicitly acknowledging the true source of the material is plagiarism.

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Since the violation of academic honesty strikes at the heart of the education process, it is subject to the severest sanctions, up to and including receiving an "F" or "XF" (an "XF" indicates that "F" was the result of academic dishonesty) for the entire class and dismissal from the university. For a full copy of this policy see:

http://catalog.pittstate.edu/contentm/blueprints/blueprint_display.php?bo_list_id=162&blueprint_id=124&sid=1&menu_id=7990

MID-TERM GRADES

After the eighth week of the fall and spring semester, mid-semester "D" and "F" grades submitted by faculty are reported by the Office of the Registrar to the dean of the college in which you are majoring. All "D" and "F" grades submitted by faculty will be reported by the Registrar to you and your academic advisor through the on-line student information system (GUS). No mid-semester report of "D" and "F" grades are distributed for the summer session.

INCOMPLETE GRADES

Incomplete grade may be assigned in rare instances when a student is unable to complete a course due to circumstances beyond his/her control. You must have completed a majority of the coursework to be eligible for this consideration. Unless granted an extension by the instructor, students have only one semester to complete the work.

If you feel like you qualify for an Incomplete grade, you should visit with your instructor and not assume an IN grade will be assigned automatically.

CREDIT FOR PRIOR LEARNING

Pittsburg State University accepts credit for AP, CLEP and IB exams. Learn more at <https://www.pittstate.edu/registrar/credit-for-prior-learning.html>. Additional information may also be found in the catalog under Academic Regulations.

FINAL GRADE REPORTS

Final grades are reported to the Registrar's Office at the conclusion of the course. You may access your grades in GUS immediately upon grade posting.

GRADE APPEALS

Final course grades are to be awarded upon criteria communicated to the student at the beginning of the semester. Additional work after a final grade was submitted cannot be used to change the grade.

If you believe that an error has been made in the assignment or recording of a final grade, you should first confer with the instructor. If such a conference does not resolve the problem, a grade appeal form must be submitted to the head of the academic department that offers the course in question. This appeal form must be submitted no later than six weeks after the beginning of

the fall or spring semester immediately following the semester in which the grade being appealed was received.

The appeal form is available online on the Registrar's Office and Graduate School's webpage under forms.

DEAD WEEK POLICY

No tests or major assignments will be presented during the week prior to final examination week, unless identified in the course syllabus presented at the start of the semester.

FINAL EXAM SCHEDULE

Final examinations will be given according to the schedule of examinations available at <https://registrar.pittstate.edu/final-exam-schedule.html>

FINAL EXAM OVERLOAD POLICY

If you have three or more final exams officially scheduled for a single day you are entitled to arrange with the faculty member instructing the highest numbered course (the 3 digit number following the department code) a different day for the exam. If two courses have the same number, the course with the lower enrollment would be rescheduled.

Students requesting accommodation should submit their request on the form found at <https://registrar.pittstate.edu/forms.html> along with a copy of their class schedule, at least two weeks prior to the beginning of final exam week. The faculty member has until the Monday of pre-finals week to arrange a mutually convenient time for administration of the final exam. If the matter cannot be resolved between student and faculty member, you may take the request to the Office of the Provost, 220 Russ Hall, no later than the Wednesday of dead week.

WEAPONS and CONCEALED CARRY POLICY

Weapons Policy website

<https://www.pittstate.edu/police/policies.html#undefined1> and Concealed Carry Weapons Policy

<https://www.pittstate.edu/police/policies.html#undefined2>

The handgun must be in the person's custody and control at all times with safety mechanism engaged. Handguns must be carried securely in a suitable carrier (backpack, purse, handbag, or other personal carrier designed and intended for the carrying of an individual's personal items). The suitable carrier must at all times remain within the exclusive and uninterrupted control of the individual. This includes wearing the carrier with one or more straps consistent with the carrier's design, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

UNIVERSITY SPONSORED STUDENT ACTIVITY POLICY

For the University Sponsored Student Activity Policy see

https://www.pittstate.edu/faculty-staff_files/documents/faculty-senate/documents/university-sponsored-activity-policy.pdf

Contact: SGA Academic Affairs Director, Room 111 Overman Student Center, Telephone: 620.235.4810 E-mail: sga_aa@pittstate.edu

WHERE TO GO FOR ASSISTANCE

Pittsburg State administration, faculty, and staff are here to assist you in your academic success. If you have questions or concerns that affect your academic success, it is important that we hear from you.

Your Instructor

Faculty members usually include their office hours and contact information in the class syllabus. If not, set a time to meet with your instructor by speaking with him/her prior to or immediately following your class session or check with the departmental office for instructor availability.

Writing Assistance

The Writing Center offers free writing consultations for students at any stage of the writing process for any writing project. Writing Center consultants are experienced writers who are committed to helping you achieve your writing goals.

Dr. Jessica Jorgenson Borchert, Director and Dr. Janet Zepemick, Assistant Director, Writing Center

Telephone: 620-235-4694 http://www.pittstate.edu/office/writing_center/

Library

Library Services, whether in the Leonard H. Axe Library or the Kansas Technology Center Library, is committed to providing innovative and learner-centered environments that will help students be successful, support the research and information needs of our campus and community library users, and enhance the University experience. Library Services offers one-on-one research assistance, print collections, online reference services, remote access to our databases, e-books and e-journals, digital archives, research guides, scanning, printing, a computer lab, and instruction programs to support the

curriculum. Axe Library is also home to the Student Success Center, the Writing Center, Honors College, the Women's and Gender Resource Center, and food and beverage services. More information is available at our website: <https://axe.pittstate.edu/index.html> or call 620-235-4879 or 620-235-4880.

Student Success Programs

Support is available to all students in Student Success Programs. Academic Success Workshops are provided throughout the semester to allow student to enhance their academic skills. Topics include note-taking strategies, test preparation, time management, among many other options. Tutoring for select general education courses is available. One-on-one academic success coaching can be scheduled to develop study plans and learn new strategies. Student-led study group support is also available when requested.

Heather Eckstein

Student Success Programs, 113 Axe

Telephone: 620-235-6578 Email: heckstein@pittstate.edu

<http://www.pittstate.edu/office/student-success-programs/>

Ashley Wade

Student Success Programs, 113 Axe

Telephone: 620-235-4951 Email: awade@pittstate.edu

<http://www.pittstate.edu/office/student-success-programs/>

Tutoring

Tutoring programs related to general education classes are available. Whether you are studying for a test, writing a paper or preparing a presentation, tutors can help you sharpen your skills and increase your knowledge. If you are struggling with a class, then a tutor can help you get back on track. Use tutoring to get better grades!

<https://www.pittstate.edu/office/student-success-programs/tutoring.html>

Computer/Technology Assistance

Gonila Geeks Help Desk is responsible for assisting students with various technology needs. Services available include help with GUS and GUS Passwords, PSU email, assistance with campus system problems and support of the campus wireless network.

In addition, we help with technology needs that are essential for academic success. Services include assistance with educational software packages used on campus including Microsoft OS, Office applications, basic Canvas support and other campus applications; help with computer hardware or software problems; wireless connectivity; and configuring new computers.

Gonila Geeks Help Desk

Telephone: 620-235-4600 E-mail: Geeks@pittstate.edu

<https://www.pittstate.edu/it/index.html>

Services for Students with Learning and Physical Disabilities

Coordinator, Center for Student Accommodations

213 Russ Hall, Telephone: 620-235-6584

<https://www.pittstate.edu/office/center-for-student-accommodations/index.html>

Student Health Center

Telephone: 620-235-4452

<https://pittstate.edu/office/health-services/index.html>

University Counseling Services

Telephone: 620-235-4452

<https://www.pittstate.edu/office/university-counseling/index.html>

Career Services

Telephone: 620-235-4140 Email: car@pittstate.edu

<https://careers.pittstate.edu/>

Financial Assistance:

- Need some help with how to make the payments? See Student Financial Assistance. <https://www.pittstate.edu/financial-aid/index.html>
- Don't forget to check with us before you make changes to your schedule to avoid future semester ineligibility.

Student Financial Assistance at faid@pittstate.edu or 620-235-4240.

Sexual Assault and Relationship Violence

Pittsburg State University prohibits all forms of sexual misconduct and relationship violence to include rape, acquaintance rape, domestic violence, dating violence, sexual assault and stalking.

Reporting Incidents of Sexual Misconduct or Relationship Violence:

<https://studentlife.pittstate.edu/get-help/sexual-misconduct.html#undefined2>

Resources for Victims of Sexual Misconduct or Relationship Violence:

<https://studentlife.pittstate.edu/get-help/sexual-misconduct.html#undefined3>

Title IX

<https://www.pittstate.edu/office/institutional-equity/title-ix.html>

Notice of Nondiscrimination

Pittsburg State University prohibits discrimination on the basis of race, color, religion, sex, national origin, sexual orientation, age, marital status, ancestry, genetic information, or disabilities. The following person has been designated to address inquiries regarding the nondiscrimination policies:
Director of Institutional Equity/Title IX Coordinator, 218 Russ Hall, 1701 S. Broadway, Pittsburg, KS 66762-7528, 620-235-4189, equity@pittstate.edu