

Start/End Dates

Meeting Days

Meeting Times

Location

Instructor

Course Topic (if applicable)

PHYSICS**Astronomy**

ASTRONY 112 INTRODUCTION TO ASTRONOMY (GL) ... An examination of concepts regarding the organization of the universe. The solar system, astronomical principles and instruments, stellar evolution and galaxies are among topics covered. Activities include field trips, observations of the night sky and of the sun with telescopes, and laboratory work. Four one-hour lectures and one two-hour laboratory/observation period per week. There are two required evening observation sessions during the semester.

COREQ: MATH 141 OR WAIVER

#4304	Section 01	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	R	09:00 AM - 10:50 AM	UH0050	Juliana Constantinescu	
	09/06-12/22	MTWR	02:00 PM - 02:50 PM	UH0141	Juliana Constantinescu	
#4307	Section 02	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	R	04:00 PM - 05:50 PM	UH0050	Juliana Constantinescu	
	09/06-12/22	MTWR	02:00 PM - 02:50 PM	UH0141	Juliana Constantinescu	

ASTRONY 114 DESCRIPTIVE ASTRONOMY (GM) ... A non-laboratory course that introduces the basic aspects of astronomy, including cultural and historical considerations. The study of galaxies, stars, as well as our solar system is included. Observational activities may be included as integral parts of the course. Three one-hour lectures per week for the regular semester.

COREQ: MATH 141 OR WAIVER

#4308 Section 01 [units: 3] Gen Ed Math/Natural Sciences (GM) NOTE: This course will be taught using Desire2Learn. A short while before class, information will be sent to each student's UWW email address. Required additional fee of \$150 will be assessed for this class.

	09/06-12/22	Arranged	Arranged	WEB BASED	Juliana Constantinescu	
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Physics

PHYSICS 130 PHYSICS FOUNDATIONS (GL) ... This course will explore topics in classical physics (motion, heat, sound, electricity, magnetism, and light) and modern physics (atomic structure, quantum mechanics, and relativity) with an emphasis on how the principles explain and predict phenomena we observe every day. Four one-hour lectures and one two-hour laboratory per week.

COREQ: MATH 141 OR CONSENT OF INSTRUCTOR

#4330	Section 01	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	W	10:00 AM - 11:50 AM	UH0058	Martin Tchernookov	
	09/06-12/22	MW	08:00 AM - 09:15 AM	UH0141	Martin Tchernookov	
	09/06-12/22	T	08:00 AM - 08:50 AM	UH0141	To Be Arranged	
#4331	Section 02	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	W	01:00 PM - 02:50 PM	UH0058	Martin Tchernookov	
	09/06-12/22	MW	08:00 AM - 09:15 AM	UH0141	Martin Tchernookov	
	09/06-12/22	T	08:00 AM - 08:50 AM	UH0141	To Be Arranged	
#4332	Section 03	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	R	10:00 AM - 11:50 AM	UH0058	Steven Sahyun	
	09/06-12/22	MW	08:00 AM - 09:15 AM	UH0141	Martin Tchernookov	
	09/06-12/22	T	08:00 AM - 08:50 AM	UH0141	To Be Arranged	

PHYSICS 140 PRINCIPLES OF PHYSICS I (GL) ... An algebra-based course in classical mechanics at the introductory level. The content covers kinematics, Newton's laws, conservation laws, oscillations and waves, applications to fluids and elasticity, and thermodynamics and kinetic theory. Applications to the life and health sciences are emphasized, and essential MCAT subject matter is included. Basic understanding of trigonometry and the manipulation of vectors is necessary. Students with adequate mathematical preparation may wish to consider taking the PHYSICS 180 series. Four one-hour lectures and one three-hour laboratory per week.

COREQ: MATH 152

#4294	Section 01	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	T	09:00 AM - 09:50 AM	UH0050	Jalal Nawash	
	09/06-12/22	T	10:00 AM - 11:50 AM	UH0050	Jalal Nawash	
	09/06-12/22	MW	11:00 AM - 12:15 PM	UH0141	Jalal Nawash	
#4295	Section 02	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	M	01:00 PM - 01:50 PM	UH0050	Jalal Nawash	
	09/06-12/22	M	02:00 PM - 03:50 PM	UH0050	Jalal Nawash	
	09/06-12/22	MW	11:00 AM - 12:15 PM	UH0141	Jalal Nawash	
#4296	Section 03	[units: 5]	Gen Ed Laboratory (GL)			
	09/06-12/22	T	01:00 PM - 01:50 PM	UH0050	Jalal Nawash	
	09/06-12/22	T	02:00 PM - 03:50 PM	UH0050	Jalal Nawash	
	09/06-12/22	MW	11:00 AM - 12:15 PM	UH0141	Jalal Nawash	

Start/End Dates Meeting Days Meeting Times Location Instructor Course Topic (if applicable)

PHYSICS 141 PRINCIPLES OF PHYSICS II (GL) ... An algebra-based course in electricity and magnetism, circuits, electromagnetic waves, optics and an introduction to modern physics. Applications to the life and health sciences are emphasized, and essential MCAT subject matter is included. Basic understanding of trigonometry and the manipulation of vectors is necessary. Students with adequate mathematical preparation may wish to consider taking the PHYSICS 180 series. Four One-hour lectures and one three-hour laboratory per week.

PREREQ: PHYSICS 140

#4339	Section 01	[units: 5]	Gen Ed Laboratory (GL)			
09/06-12/22	W	09:00 AM - 09:50 AM	UH0050	Abdelkrim Boukahil		
09/06-12/22	W	10:00 AM - 11:50 AM	UH0050	Abdelkrim Boukahil		
09/06-12/22	TR	11:00 AM - 12:15 PM	UH0141	Abdelkrim Boukahil		

PHYSICS 180 PHYSICS FOR SCIENTISTS AND ENGINEERS I (GL) ... A lecture course in introductory physics including a mathematically rigorous analysis of mechanics, vibrations, wave motion, and thermodynamics using calculus. For majors and minors in physics, engineering, chemistry, mathematics. Four one-hour lectures and one three-hour lab per week. High school calculus recommended.

COREQ: MATH 253

#4341	Section 01	[units: 5]	Gen Ed Laboratory (GL)			
09/06-12/22	T	09:00 AM - 10:50 AM	UH0058	Robert Benjamin		
09/06-12/22	MWF	01:00 PM - 01:50 PM	UH0141	Robert Benjamin		
09/06-12/22	F	02:00 PM - 02:50 PM	UH0141	Robert Benjamin		
#4342	Section 02	[units: 5]	Gen Ed Laboratory (GL)			
09/06-12/22	T	12:00 PM - 01:50 PM	UH0058	Robert Benjamin		
09/06-12/22	MWF	01:00 PM - 01:50 PM	UH0141	Robert Benjamin		
09/06-12/22	F	02:00 PM - 02:50 PM	UH0141	Robert Benjamin		

PHYSICS 190 FRONTIERS OF ENGINEERING AND PHYSICS ... An introduction to career tracks and career opportunities in engineering and physics. This course will feature readings on different career possibilities in engineering and physics and visiting lectures by practicing physicists and engineers. Professional skills, identification of career tracks, and scientific and technical communication will be emphasized. One hour lecture per week.

#4321	Section 01	[units: 1]				
09/06-12/22	F	12:00 PM - 12:50 PM	UH0140	Ozgur Yavuzcetin		

PHYSICS 212 PHYSICS FOR ELEMENTARY TEACHERS (GL) ... This course is a one-semester introduction to physics with curriculum and instruction designed as an activity-based hands-on course for K-8 elementary education students and open to all education majors. The course emphasizes a student-oriented pedagogy in order to develop various physics concepts and the nature of science. Topics covered include motion, forces, energy, light, heat, electricity, and magnetism.

PREREQ: MATH 141 AND RESTRICTED TO STUDENTS WITH BSE PROGRAM

#4333	Section 01	[units: 4]	Gen Ed Laboratory (GL)			
09/06-12/22	MWF	10:00 AM - 11:45 AM	UH0166	Steven Sahyun		

PHYSICS 221 INTERMEDIATE LABORATORY ... A laboratory course concentrating on techniques of recording, interpretation of, and reporting experimental data. Extensive use will be made of computers in data processing. Topics covered include data acquisition and the recording of data, error analysis, numerical analysis, graphing techniques, computational tools and report writing. Two two-hour laboratories per week.

PREREQ: PHYSICS 181, OR PHYSICS 141 AND MATH 254

#4322	Section 01	[units: 2]				
09/06-12/22	MW	12:00 PM - 01:50 PM	UH0053	Ozgur Yavuzcetin		
09/06-12/22	MW	12:00 PM - 01:50 PM	UH0150	Ozgur Yavuzcetin		
#4323	Section 02	[units: 2]				
09/06-12/22	MW	02:00 PM - 03:50 PM	UH0053	Ozgur Yavuzcetin		
09/06-12/22	MW	02:00 PM - 03:50 PM	UH0150	Ozgur Yavuzcetin		

PHYSICS 240 PHYSICS OF SOUND AND MUSIC (GM) ... A descriptive course that deals with various properties of sound, the generation of sound by traditional musical instruments and the electronic production and reproduction of sound. The physical process of hearing and the acoustical properties of rooms are also included. Three one-hour lecture periods per week.

COREQ: MATH 140 OR MATH 141

#4301	Section 01	[units: 3]	Gen Ed Math/Natural Sciences (GM)			
09/06-12/22	TR	12:30 PM - 01:45 PM	UH0166	Juliana Constantinescu		

PHYSICS 305 MECHANICS - STATICS ... A study of forces on rigid bodies in equilibrium. Topics include force systems, equilibrium, distributed forces, structures, friction, internal forces, centroids and moments of inertia. This course also introduces notations and operations associated with tensor calculus.

PREREQ: PHYSICS 181 OR PHYSICS 141 AND MATH 254

#4299	Section 01	[units: 3]				
09/06-12/22	MW	09:30 AM - 10:45 AM	UH0141	Juliana Constantinescu		

PHYSICS 324 METHODS OF THEORETICAL PHYSICS ... Topics covered include methods of theoretical physics, vector analysis, differential equations of mathematical physics, analytic functions and integration in the complex plane, Laplace transforms, Fourier series, Fourier transforms, and their applications in physics. Three one hour lectures per week.

PREREQ: PHYSICS 181, OR PHYSICS 141 AND MATH 254

#4334	Section 01	[units: 3]				
09/06-12/22	TR	09:30 AM - 10:45 AM	UH0141	Abdelkrim Boukahil		

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PHYSICS 425 QUANTUM MECHANICS ... This course will explore the tools and postulates of Quantum Mechanics. Topics will include one and three-dimensional problems, angular momentum, as well as approximation methods such as time independent perturbation theory, and Wentzel-Kramers-Brillouin (WKB) methods. Three one-hour lectures per week.

PREREQ: PHYSICS 324

#4337 Section 01 [units: 3]

09/06-12/22 TR 02:00 PM - 03:15 PM UH0140 Abdelkrim Boukahil

PHYSICS 489 PHYSICS SENIOR SEMINAR ... The course will train students in making scientific presentations, summarize the concepts and methods taught in the physics major curriculum, and prepare them for the Physics Major Field Test as the final exam in the course. Students will become familiar with physics literature and learn to write abstracts and project proposals. The will demonstrate proper methods of verbal and visual presentation by delivering a graded series of talks, concluding with a satisfactory colloquium on a physics topic. Two one-hour sessions a week.

PREREQ: PHYSICS 305 AND PHYSICS 344 OR CONSENT OF DEPARTMENT

#4378 Section 01 [units: 2]

09/06-12/22 WF 12:00 PM - 12:50 PM UH0166 Steven Sahyun

PHYSICS 498 INDEPENDENT STUDY ... Study of a selected topic or topics under the direction of a faculty member. Repeatable for a maximum of 3 credits in major or minor in physics.

PREREQ: JUNIOR/SENIOR STATUS OR CONSENT OF INSTRUCTOR

#4396 Section 01 [units: 1-3]

09/06-12/22 Arranged Arranged Robert Benjamin

Dept. Consent

#4397 Section 02 [units: 1-3]

09/06-12/22 Arranged Arranged Abdelkrim Boukahil

Dept. Consent

#4398 Section 03 [units: 1-3]

09/06-12/22 Arranged Arranged Juliana Constantinescu

Dept. Consent

#4399 Section 04 [units: 1-3]

09/06-12/22 Arranged Arranged Jalal Nawash

Dept. Consent

#4400 Section 05 [units: 1-3]

09/06-12/22 Arranged Arranged Steven Sahyun

Dept. Consent

#4401 Section 06 [units: 1-3]

09/06-12/22 Arranged Arranged Ozgur Yavuzcetin

Dept. Consent

PHYSICS 498R INDEPENDENT STUDENT - UNDERGRADUATE RESEARCH ... Study of a selected topic or topics under the direction of a faculty member. Repeatable for a maximum of 3 credits in major or minor in physics.

PREREQ: JUNIOR/SENIOR STATUS OR CONSENT OF INSTRUCTOR

#4404 Section 01 [units: 1-3]

09/06-12/22 Arranged Arranged Robert Benjamin

Dept. Consent

#4405 Section 02 [units: 1-3]

09/06-12/22 Arranged Arranged Abdelkrim Boukahil

Dept. Consent

#4406 Section 03 [units: 1-3]

09/06-12/22 Arranged Arranged Juliana Constantinescu

Dept. Consent

#4407 Section 04 [units: 1-3]

09/06-12/22 Arranged Arranged Jalal Nawash

Dept. Consent

#4408 Section 05 [units: 1-3]

09/06-12/22 Arranged Arranged Steven Sahyun

Dept. Consent

#4409 Section 06 [units: 1-3]

09/06-12/22 Arranged Arranged Ozgur Yavuzcetin

Dept. Consent