

**DEPARTMENT OF PHYSICS AND ASTRONOMY**  
**FALL TERM 2020 (2211): SCHEDULE OF CLASSES**  
**Classes Begin: Monday, August 19, 2020**  
**ASTRONOMY**

<u>NO.</u>	<u>CLASS#</u>	<u>TITLE</u>	<u>DAY AND TIME</u>	<u>ROOM</u>	<u>INSTRUCTOR</u>
0087	11110	Basics of Space Flight	TH 2:50-4:05 pm	WEB TBA	<b>Pekker</b> (100-closed) (grader: Wang, Tianyi)(+)
0088	10926	Stonehenge to Hubble	TH 1:15-2:30 pm	WEB TBA	<b>Badenes</b> (138) (grader: Court, T)
0088	18075	Stonehenge to Hubble	T 6:30-9:00 pm	WEB TBA	<b>Badenes</b> (50-closed) (grader: Sanderson, A)
0089	10925	Stars, Galx. & Cosmos	MWF 2:20-3:10 pm	WEB TBA	<b>Newman</b> (120-closed)
	11123	Recitation	H 3:25-4:15 pm	WEB TBA	Richie, H (40)
	11124	Recitation	F 12:10-1:00 pm	WEB TBA	<b>Good</b> (40)
	10723	Recitation	F 1:15-2:05 pm	WEB TBA	Richie, H (40)
0089	15343	Stars, Galax. & Cosmos	TH 11:05-12:20 pm	WEB TBA	<b>Rao</b> (149)
	15345	Recitation	H 2:20-3:10 pm	WEB TBA	Florez, L (30)
	15344	Recitation	H 4:30-5:20 pm	WEB TBA	Florez, L (40)
	24192	Recitation	F 12:10-1:00 pm	WEB TBA	Florez, L (40)
	11125	Recitation	F 1:00-1:50 pm	WEB TBA	Florez, L (39)
0113	10724	Introduction to Astronomy	TH 1:15-2:30 pm	104 Thaw	<b>Schneider</b> (29)
0413	23743	Honors Intro to Astronomy	T 12:10-1:00 pm	106 Allen	
			TH 1:15-2:30 pm	104 Thaw	
1263	30508	Techniques of Astronomy	MH 6:30-7:20 pm	102 Thaw	<b>Turnshek</b> (21)
	30509	Recitation	M 7:30-11:30 pm	AO (12)	Richie, H. (+)
	30510	Recitation	H 7:30-11:30 pm	AO (9)	Richie, H.
1900	16843	Internship	By Appt.	100 Allen	
1901	16775	Independent Study	By Appt.	100 Allen	
1902	10150	Directed Reading	By Appt.	100 Allen	
1903	16776	Directed Research	By Appt.	100 Allen	
2000	10151	Res. & Thesis/MS Deg.	By Appt.	100 Allen	
2990	10152	Independ. Study (Spec. Per.)	By Appt.	100 Allen	
2998	10153	Teach. Astronomy/Prac.	By Appt.	100 Allen	<b>Kosowsky</b> (4)
3000	10154	Res. & Dissr./PhD	By Appt.	100 Allen (3)	
3101	30521	Special Topics: Intro to Astro	TH 11:05-12:20 pm	WEB TBA	<b>Bezanson</b> (13)
3550	30511	Stellar Structure	MW 1:15-2:30 pm	WEB TBA	<b>Hillier</b> (9)
3902	10156	Directed Study ( <i>Spec.Per</i> )	TBA		
3907	23077	Directed Research ( <i>Spec.Per</i> )	TBA		

August 20, 2020

## PHYSICS

<u>NO.</u>	<u>CLASS#</u>	<u>TITLE</u>	<u>DAY AND TIME</u>	<u>ROOM</u>	<u>INSTRUCTOR</u>
0081	27779	Space & Time/Light & Matter	MWF 2:20-3:10 pm	WEB TBA	<b>Rao</b> (28)
0082	30512	Science of Musical Sounds	TH 1:15-2:30 pm	211 Lawrn	<b>Broccio</b> (33)
<del>0089</del>	<del>31497</del>	<del>Physics and Science Fiction</del>	<del>TH 9:30-10:45 am</del>	<del>210 Thaw</del>	<del><b>Kosowsky</b> cancelled</del>
0110	10485	Intro. To Physics 1	MWF 12:10-1:00 pm	WEB TBA	<b>Broccio</b> (269-wait 6)
0110	10276	Recitation	M 1:15-2:05 pm	WEB TBA	Qin, Han (30)
0110	11108	Recitation	M 2:20-3:10 pm	WEB TBA	Qin, Han (30)
0110	11369	Recitation	M 3:25-4:15 pm	WEB TBA	Broccio, M (30)
0110	10277	Recitation	T 11:05-11:55 am	WEB TBA	Biermann, E. (30)
0110	11109	Recitation	T 12:10-1:00 pm	WEB TBA	Biermann, E. (30)
0110	16842	Recitation	T 1:15-2:05 pm	WEB TBA	Biermann, E. (30)
0110	11368	Recitation	T 2:20-3:10 pm	WEB TBA	Qin, Han (30)
0110	25801	Recitation	T 3:25-4:15 pm	WEB TBA	Qin, Han (30)
0110	32352	Recitation	T 4:30-5:20 pm	WEB TBA	Biermann, E. (29)
0110	10486	Intro. To Physics 1	TH 2:50-4:05 pm	WEB TBA	<b>Good</b> (235, wait 1)
0110	16651	Recitation	T 12:10-1:00 pm	WEB TBA	Yeckley, M (30)
0110	10604	Recitation	T 1:15-2:05 pm	WEB TBA	Dieterlen, M (31)
0110	10280	Recitation	T 4:30-5:20 pm	WEB TBA	Yeckley, M (30)
0110	32353	Recitation	T 5:30-6:20 pm	WEB TBA	Yeckley, M (29)
0110	10281	Recitation	H 12:10-1:00 pm	WEB TBA	Elgamel, M (30)
0110	15346	Recitation	H 1:15-2:05 pm	WEB TBA	Dieterlen, M (30)
0110	10282	Recitation	H 4:30-5:20 pm	WEB TBA	Elgamel, M (29)
0110	24774	Recitation	H 5:30-6:20 pm	WEB TBA	Yeckley, M (25)
0110	10278	Intro. To Physics 1	TH 6:30-7:50 pm	WEB TBA	<b>Dominick</b> (132-wait 1)
0110	27245	Recitation	T 5:30-6:20 pm	WEB TBA	Mezini, L (30)
0110	32354	Recitation	T 5:30-6:20 pm	WEB TBA	Broccio (12)
0110	10279	Recitation	T 8:00-8:45 pm	WEB TBA	Mezini, L (30)
0110	23818	Recitation	H 5:30-6:20 pm	WEB TBA	Mezini, L (30)
0110	28911	Recitation	H 8:00-8:45 pm	WEB TBA	Mezini, L (30)
0111	10487	Intro. To Physics 2	MWF 1:15-2:05 pm	WEB TBA	<b>Good</b> (201-wait 4)
0111	32355	Recitation	M 12:10-1:00 pm	WEB TBA	Hyatt, T (24)
0111	10283	Recitation	M 2:20-3:10 pm	WEB TBA	Hyatt, T (30)
0111	10284	Recitation	M 3:25-4:15 pm	WEB TBA	Hyatt, T (30)
0111	10285	Recitation	T 11:05-11:55 am	WEB TBA	Sanderson, A. (+) (30)
0111	21911	Recitation	T 3:25-4:15 pm	WEB TBA	Hyatt, T (29)
0111	18604	Recitation	T 4:30-5:20 pm	WEB TBA	Sanderson, A (30)
0111	25800	Recitation	T 5:30-6:20 pm	WEB TBA	Sanderson, A (27)

0174	11252	Bas. Phys. Sc. Eng. 1	MF 2:20-3:10 pm W 2:20-4:10 pm	CMH AUD CMH AUD	<b>Mong</b> (210, wait 2)
0174	11313	Recitation	M 3:25-4:15 pm	WEB TBA	Chen, Lisong (30)
0174	11253	Recitation	M 3:25-4:15 pm	WEB TBA	Leung, S Ching(30)
0174	29225	Recitation	W 4:30-5:20 pm	WEB TBA	Chen, Lisong (30)
0174	31550	Recitation	W 4:30-5:20 pm	WEB TBA	Leung, S Ching (30)
0174	26123	Recitation	F 3:25-4:15 pm	WEB TBA	Chen, Lisong (30)
0174	31526	Recitation	F 3:25-4:15 pm	WEB TBA	Leung, Sze Ching (30)
0174	21231	Recitation	F 4:30-5:20 pm	WEB TBA	Chen, Lisong (30)
0174	11060	Bas. Phys. Sc. Eng. 1	MF 3:25-4:15 pm	CMH AUD	<b>Nero</b> (120, wait 9)
0174	11314	Recitation	M 2:20-3:10 pm	WEB TBA	Howard, M. (30)
0174	11165	Recitation	W 3:25-4:15 pm	WEB TBA	Koester, R. (30)
0174	18378	Recitation	W 4:30-5:20 pm	WEB TBA	Howard, M (30)
0174	24936	Recitation	F 4:30-5:20 pm	WEB TBA	Howard, M (30)
0174	23130	Bas. Phys. Sc. Eng. 1	MF 4:30-5:20 pm	CMH AUD	<b>Nero</b> (120, wait 5)
0174	22327	Recitation	M 3:25-4:15 pm	WEB TBA	Koester, R. (30)
0174	23131	Recitation	W 2:20-3:10 pm	WEB TBA	Howard, M. (30)
0174	11247	Recitation	F 2:20-3:10 pm	WEB TBA	Koester, R (30)
0174	24937	Recitation	F 3:25-4:15 pm	WEB TBA	Koester, R (21)
0174	11126	Bas. Phys. Sc. Eng. 1 Bas. Phys. Sc. Eng. 1	MF 10:00-10:50 am W 10:00-11:50 am	WEB TBA WEB TBA	<b>Batell</b> (150, wait 3)
0174	11127	Recitation	W 1:15-2:05 pm	WEB TBA	Nero, D (30)
0174	21998	Recitation	W 2:20-3:10 pm	WEB TBA	Jardine, M (30)
0174	11128	Recitation	H 11:05-11:55 am	WEB TBA	Jardine, M (30)
0174	18603	Recitation	H 12:10-1:00 pm	WEB TBA	Jardine, M (30)
0174	11129	Recitation	H 1:15-2:05 pm	WEB TBA	Jardine, M (30)
0174	11130	Bas. Phys. Sc. Eng. 1	MW 6:30-8:10 pm	WEB TBA	<b>Banerjee</b> (106)
0174	11131	Recitation	M 8:30-9:20 pm	WEB TBA	Khan, M (28)
0174	16856	Recitation	W 5:30-6:20 pm	WEB TBA	Khan, M (30)
0174	21999	Recitation	W 5:30-6:20 pm	WEB TBA	Huang, W(30)(+)
0174	11132	Recitation	W 8:30-9:20 pm	WEB TBA	Khan, M (18)
0175	11248	Bas. Phys. Sc. Eng. 2	MF 8:55-9:45 am W 7:50-9:40 am	L9 CLAPP L9 CLAPP	<b>Devaty</b> (132, wait 1)
0175	11249	Recitation	W 12:10-1:00 pm	WEB TBA	Suarez, N (+) (30)
0175	11250	Recitation	W 2:20-3:10 pm	WEB TBA	Monroy, R (23)
0175	18602	Recitation	H 12:10-1:00 pm	WEB TBA	Monroy, R (30)
0175	11251	Recitation	H 2:20-3:10 pm	WEB TBA	Monroy, R (22)
0175	23280	Recitation	H 3:25-4:15 pm	WEB TBA	Monroy, R (22)

0212	10286	Intro. Lab. Phys. Lec.	T 12:10-1:00 pm	112 Alumni	<b>Clark</b> (131)
0212	10287	Laboratory	T 1:15-4:05 pm	408 OEH	Byard, S. (24)
0212	11331	Laboratory	T 4:30-7:20 pm	408 OEH	Gorski, D (24)
0212	26977	Laboratory	W 8:55-11:45 am	408 OEH	Zhang, Yuze (19)
0212	10610	Laboratory	W 2:20-5:10 pm	408 OEH	Gonzalez, L. (16)
0212	10611	Laboratory	H 8:55-11:45 am	408 OEH	Wang, Zehua. (24)
0212	10288	Laboratory	H 1:15-4:05 pm	408 OEH	Wan, Qiaochu (23)
0212	18605	Intro. Lab. Phys. Lec.	T 6:30-7:20 pm	102 OSC	<b>Clark</b> (70)
0212	18607	Laboratory	T 7:30-10:20 pm	408 OEH	Harris, E. (24)
0212	18606	Laboratory	W 6:30-9:20 pm	408 OEH	Houglund, N. (22)
0212	26978	Laboratory	H 6:30-9:20 pm	408 OEH	Cao, Shuyang (24)
0219	10289	Bas. Lab. Phys. Sc. & Eng.	T 10:00-10:50 am	WEB TBA	<b>Clark</b> (41)
0219	10290	Laboratory	T 1:15-4:05 pm	402 OEH	Court, T. (+) (20)
0219	18774	Laboratory	T 7:30-10:20 pm	402 OEH	Beheshti, A (21)
0310	25641	First Year Seminar in P&A	W 12:10-1:00 pm	206 Eberly	<b>Wood-Vasey</b> (7)
0410	25189	Physics of Human Body 1	W 4:30-5:20 pm	2700 WWPB	<b>Broccio</b> (14)
0475	10293	Intr. Phys. Sc. Eng. 1	MWF 11:05-11:55 am	WEB TBA	<b>Wood-Vasey</b> (49)
0475	10294	Recitation	TH 11:05-11:55 AM	WEB TBA	Hand, Jared
0477	21589	Prin. Mod. Phys. 1	MWF 11:00-11:50 am MW 12:00-12:15 pm	343 Alumni WEB TBA	<b>Savinov</b> (51) (grader: Suarez, N)(+)
0520	15347	Mod. Phys. Measurements	TH 1:15-4:05 pm	324 OEH	<b>Naples</b> (14)
1310	31551	Undergrad Seminar	W 12:10-1:00 pm	WEB TBA	<b>Clark</b> (9)
1321	21586	Comp Methods in Phys	MWF 10:00-10:50 am	105 Lawrn	<b>Mueller</b> (39) (grader: Huang, W.)(+)
1351	10488	Interme. Elec. & Mag.	TH 9:25-10:40 am	WEB TA	<b>Hong</b> (40) (grader: Wang, Tianyi)(+)
1361	10291	Wave Mot. & Optics	WF 1:15-2:05 pm	900 LRDC	<b>Dutt</b> (22)
1361	10292	Laboratory	W 2:20-5:40 pm	306 OEH	Wijesinghe, P (10)
1361	26979	Laboratory	F 2:20-5:40 pm	306 OEH	Yao, Q. (12)
1661	22073	Wave Mot. Opt./Writ.	W 8:55-9:45 am	229 Bened.	<b>Dutt</b> (14)
1661	26918	Wave Mot. Opt./Writ.	W 8:55-9:45 am	103 Allen	<b>Naples</b> (3)
1661	27142	Wave Mot. Opt./Writ.	W 8:55-9:45 am	100 Allen	<b>Frolov</b> (5)
1661	31853	Wave Mot. Opt./Writ.	W 8:55-9:45 am	106 Allen	<b>Turnshek</b> (3)
1370	10295	Intr. Quan. Mech. 1	MWF 11:05-11:55 am	WEB TBA	<b>Levy</b> (30) (grader: Wang, Zehua)

1373	15348	Math Methods in Physics	TH 9:25-10:40 am	102 Thaw	<b>Boudreau</b> (14)
<del>1376</del>	<del>30513</del>	<del>Intro to Biophysics</del>	<del>TH 11:00-12:15 pm</del>	<del>206 CL</del>	<del><b>Salman</b> (4) Cancelled</del>
1415	25642	Lab: Quantum Phys: Nano	F 12:10-1:00 pm	106 Allen	<b>Frolov</b> (6)
	25643	Laboratory	M 1:15-4:05 pm	TBD	Purkayastha, A
1900	10296	Internship (Spec. Per.)	By Appt.	100 Allen	
1901	10297	Independent Study (Spec. Per)	By Appt.	100 Allen	
1901	10298	Independent Study/UHC (Per)	By Appt.	100 Allen	
1902	10299	Directed Reading (Spec. Per.)	By Appt.	100 Allen	
1903	10300	Directed Research (Spec. Per.)	By Appt.	100 Allen (6)	
1904	24965	Experience in UG Teaching	By Appt.	100 Allen (13)	
2000	10431	Res. & Thesis MS Deg.	By Appt.	100 Allen	
2101	10432	Special Topics (Spec. Per.)	By Appt.	100 Allen	
2370	30514	Intro to Quantum Mechanics	MWF 11:05-11:55 am	WEB TBA	<b>Levy</b> (3) (grader: Wang, Z.)
2373	16674	Math Methods in Physics	TH 9:25-10:40 am	102 Thaw	<b>Boudreau</b> (11) (grader: Dominick)
2513	10433	Dynamical Systems	MWF 10:00-10:50 am	300 OEH	<b>Wu</b> (21) (grader: Raen, T.)
2565	10434	Non-Rel. Quan. Mech. 1	MWF 11:05-11:55 am	300 OEH	<b>Leibovich</b> (30) (grader: Dominick)
2990	10435	Independent Study	By Appt.	100 Allen	
2997	22074	Teaching of Physics	Friday 3-4:50 pm	121 Alum	<b>Clark</b> (19)
2998	10436	Teaching Phys./Prac.	By Appt.	100 Allen	<b>Kosowsky</b> (29)
2999	16879	Phys. & Astron. Colloq.	By Appt.	100 Allen	<b>Rao</b> (22)
3000	10437	Res. & Dissert/PhD	By Appt.	100 Allen	(7)
3101	32740	Special Topics: Q Optics/Q Info	By Appt.	100 Allen	<b>Dutt</b> (2)
3101	11004	Special Topics: Biophysics	TH 1:15-2:30 pm	WEB TBA	<b>Mugler</b> (9)
3101	32753	Special Topics: Quantum Transport	By Appt.	100 Allen	<b>Frolov</b> (5)
3274	21760	Computational Methods	TH 2:50-4:05 pm	300 OEH	<b>Boudreau</b> (13)
<del>3707</del>	<del>Intro to Many Body Physics</del>	<del>CMU</del>	<del>CMU</del>	<del>CMU</del>	<del><b>CMU - CANCELED</b></del>
3715	30515	Solid State Physics	MW 11:05-12:20 pm	WEB TBA	<b>Snoke</b> (23) (grader: Zhang, Yuze)(+)
3717		Particle Physics	MWF 12:00-12:50 pm	DH A325	Quinn, B. <b>CMU**</b>
3765	30516	Field Theory 1	MWF 3:25-4:15 pm	WEB TBA	<b>Boyanovsky</b> (16)
** CMU # for our 3717 is 33779					
3902	10438	Directed Study ( <i>Spec.Per</i> ) (1)			
3907	23078	Directed Research ( <i>Spec.Per</i> )	( <i>variable credits</i> ) (35)		
<b>FULL-TIME DISSERTATION STUDY*</b>					
3999	10743	FTDB	0crs	Indicates FTDS for students in Natural Science Departments (class# is term specific)	

**Notes: H indicates "Thursday"**

**+ indicates TA is attached to another course**

\*Doctoral students must have completed all formal coursework and at least 72 credits. A&S permits FTDS students to register for an additional 6 credits if they discover a course of interest to their research and studies.

August 20, 2020