University of Wyoming, College of Arts & Sciences Requirements Checklist – Astronomy B.S. For students matriculating fall 2003 and after.

Stude	ent:	Advisor:	Initial Date of Program:
Haiv	preity Studios Brograms		
(P)	Physical Activity & Health		1 course 1 gradit
(F) (I)	Intellectual Community		1 course, 1 credit 1 course, 1-3 credits
(I) (V)	U.S. & Wyoming Constitutions		1 course, 3 credits
(WA)	Writing 1		1 course, 3 credits
(QA)	Quantitative Reasoning 1		1 course, 3 credits
(QB)	Quantitative Reasoning 2		1 course, 3 credits
(O)	Oral Communication		1 course, 3 credits
Scienc	es _ SR Biological: SE Farth: SE	Physical: S Integrated S	cience
Sciences – SB Biological; SE Earth; SP Physical; S Integr 1 course, 4 credits			1 course, 4 credits
			a francis O of A different acts assists
		CS, CA; at least 3 course	s from 3 of 4 different categories
Arts (C			1 course, 3 credits
	nities (CH)		1 course, 3 credits1 course, 3 credits
	science (CS)		
megra	ated Cultural Context (C)		1 course, 3 credits
Δddi	tional USP Requirements:		
			ategories or courses in the major.
	Writing 2	discs in the above con c	
	Writing 3		
(L)	Information Literacy		
(D)	U.S. Diversity		
(G)	Global Awareness		
(0)	G.o.s.a. / twa.o.i.o.o		
A & C	Core:		
		introductory lovel of a lan	guage, 2 courses (8 credits total) in the same language
	minimum grade of C in the seco		u. 1 course, 4 credits
i cour	se, 4 credits		Course, 4 credits
Non-W	/estern (NW): Approved courses	may simultaneously fulfill	other requirements in University Studies program, the
			proved courses are listed on the A&S Website.
	se, 3 credits		To you do allow allowed all the ride was allowed.
Upper	Division Courses: 9 credits (3 co	ourses) of Upper Division	courses (3XXX-level or above) outside the
depart	ment/program in which the stude	ent's major resides and no	ne that are cross-listed with courses in the department of
			A&S interdisciplinary programs (American Indian studies
			ural Resources, Microbiology, International Studies, and
			the USP components of P, I, QA, QB, O, V, WA, S, SB,
	P, C, CA, CS, or CH. These coul		
	se, 3 credits		a minor or a second major.
1 cour	se, 3 credits		
1 cour	se, 3 credits		
i cour	30, 3 credits		
Unive	ersity Upper Division Req	uirement:	
	dits (3XXX-level or above): 30 of		om the University of Wyoming.
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The following courses are for the major requirements and are offered in no particular order. Please consult with your advisor for scheduling sequence.

advisor for scheduling sequence.						
COURSE	USP	<u>CREDITS</u>	PREREQUISITES			
☐ PHYS 1210 Engineering Physics I	SP	4.0	C in MATH 2200 &			
			MATH 2205 concur			
☐ PHYS 1220 Engineering Physics II	SP	4.0	C in PHYS 1210, MATH			
			2200,2205&2210concur			
☐ PHYS 2310 Physics III: Waves and Optics (F)		4.0	1320			
☐ PHYS 2320 Physics IV: Modern Physics (S)		3.0	1320			
☐ PHYS 3640 Modern Electronics & Experimental Techniques (F)		4.0	2320			
☐ PHYS 3650 Adv Lab in Modern Phys & Elect (S)		4.0	2320			
☐ PHYS 4210 Classical Mechanics (S)		3.0	2310			
☐ PHYS 4310 Quantum Mechanics (F)		3.0	4210			
☐ PHYS 4410 Electricity and Magnetism I (F)		3.0	4210			
☐ PHYS 4420 Electricity and Magnetism II (S)		3.0	4410			
☐ PHYS 4510 Thermodynamics & Stat Mechanics		3.0	4310			
☐ PHYS 4840 Mathematical & Comp Physics II (S**)		3.0				
☐ ASTR 2310 General Astronomy I (S**)		4.0	PHYS1210, MATH2200			
☐ ASTR 2320 General Astronomy II (S**)		4.0	PHYS1210, MATH2200			
☐ ASTR 4610 Introduction to Astrophysics (S)		3.0	ASTR2310, PHYS4410			
□ MATH 2200 Calculus I	QB	4.0	C in MATH 1405 or 1450 or level 5 Math Placement or Math ACT 27 or SAT 600			
☐ MATH 2205 Calculus II		4.0	C in 2200			
☐ MATH 2210 Calculus III		4.0	C in 2205			
☐ MATH 2250 Elementary Linear Algebra		3.0	C in 2200 or 2350			
☐ MATH 2310 Applied Differential Equations I		3.0	C in 2205			
2 Mil 111 2010 / ppilod Billorofilial Equations 1		0.0	0 III 2200			
□ COSC 1010 Intro to Computer Science I		4.0	C in MATH 1400 or level 4 Math Placement within 1 yr prior			
Misc. Upper Division – 8 hours			within 1 yr phor			
□ Course:						
□ Course:						
□ Course:						
Select from:						
ENGL 4010 Technical writing (pre: WA, WB)						

CHEM 4505 Physical Chemistry (pre: CHEM 1030)

GEOL 3500 Global Change (pre: none)

GEOL 4200 Planetary Geology (pre: none)

PHIL 3140 Philosophy of Science (pre: 6 hrs of science)

PHIL 3500 History of Science (pre: 3hrs of PHIL, 3 hrs of science)

COSC 4530 Image Processing (pre: MATH 2205, 2250, COSC 1030)

STAT 4220 Engineering Statistics (pre: MATH 2204)

MATH 4230 Complex Analysis (pre: MATH 2210)

MATH 4340 Numerical Analysis (MATH 2310, 2250, COSC1030)

MATH 4440 Partial Diff Eqns (pre: MATH 2210)

PHYS 4350 Atomic & Molecular Physics (pre: PHYS 4210, 4310, 4420, MATH 4440)

PHYS 4510 (Statistical Machanics (pre: PHYS 4310)

PHYS 4830/40 Math Physics I, II (pre: PHYS 2310 or 2320; MATH 2210)

ASTR 4610 Astrophysics (pre: ASTR 2310)

ASTR 5420/30 Stellar Atmospheres

ASTR 5440 Milky Way

ASTR 5460 Cosmology

ASTR 5465 Galaxies

ASTR 5470 Interstellar Matter

ASTR 5150 Astrophysical Techniques