Degree:	Dhycics	DΛ	24 25

		Degree: Physics, B.A. 24-25		
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester (FALL)		
E	SCI 130	Connecting to STEM Majors		2
A1		Oral Communication		3
LD Major/B1&B3	PHYS 135	Physics for Scientists and Engineers I		4
LD Major/B4	MATH 130	Calculus I		4
C1		Arts		3
			Total:	16
	1	Second Semester (SPRING)		Ι
A2		Written Communication		3
LD Major	PHYS 136	Physics for Scientists and Engineers II		4
LD Major	MATH 131	Calculus II		3
C2		Humanities		3
Elective		Transaction		1
Licetive			Total:	14
	'	Third Semester (FALL)		
E		Lifelong Learning and Self-Development		1
A3	PHIL 100	Workshop in Critical Thinking		3
LD Major	PHYS 137	Physics for Scientists and Engineers III		4
D1/Code 1		Social Science/US Code		3
B2		Life Science		3
Elective				1
			Total:	15
		Fourth Semester (SPRING)		
LD Major/Second Comp	PHYS 230	Physical Reasoning		3
LD Major	MATH 215	Introduction to Linear Algebra		3
LD Majoi	IVIAI11 213	ma oduction to Linear Algebra	+	3
Add'l C1 or C2*		Arts or Humanities		3
D2/Code 2		Social Science/US Code		3
F		Ethnic Studies		3
			Total:	15
			•	
	1	Fifth Semester (FALL)	MATH 230,	
			and PHYS 137	
UD Major	PHYS 350	Quantum Mechanics I	or PHYS 126	3
			MATH 230,	
			and PHYS 137	
UD Major	PHYS 380	Advanced Lab I	or PHYS 126	3
UD Major	PHYS	Physics Elective		3
UWR				3
UD Free Elective			Total:	3 15
		Sixth Semester (SPRING)	Total.	13
		Sixtii Semester (SFRING)	MATH 230,	
			and PHYS 137	
UD Major	PHYS 330	Analytical Mechanics	or PHYS 126	3
UD Made	DUNG 221	Advanced Laboratory II: Experimental	DING SSS	_
UD Major	PHYS 381	Methods	PHYS 380	3
UD Free Elective			+	3
UD Free Elective UD Free Elective			+	3
2			Total:	15
	-	Seventh Semester (FALL)	1	
			MATH 230,	
		<u></u>	and PHYS 137	
UD Major	PHYS 450	Electromagnetism I	or PHYS 126	3
UD Major	PHYS elective			3
UD Free Elective				3
UD-C/Overlay UD-B/Overlay		1	+	3
OD-D/Overldy			Total:	15
	-	Eighth Semester (SPRING)	Total.	13
UD-D/Overlay				3
,			MATH 230,	
			and PHYS 137	
UD Major	PHYS 340	Statistical Mech. & Thermo.	or PHYS 126	3
		-		3
	1			3
UD Free Elective				
UD Free Elective			Takalı	3
UD Free Elective UD Free Elective UD Free Elective Total Units:			Total:	1

Note: No changes to, or from, the credit/no credit pattern are permitted after the Grade Type Change period. There are no exceptions to this rule. Courses in a student's major department, regardless of course prefix, may not be taken "CR/NC," unless that is the only grading pattern in the course.

Updated:4/1/2024

CSL	IEB General Breadth and Graduation Requirement Checklist
	nits): Communication in the English Language & Critical Thinking (Must
	earn passing grade of C-/CR or better)
☐ A1. CON	MM 100 or 104, MLL 111
☐ A2. ENG	GL 101, 102, or 104
☐ A3. PHI	
	Area B (9 units) : Scientific Inquiry & Quantitative Reasoning
☐ B1. Physi	
☐ B2. Life	
_	pratory Activity
	ntitative Reasoning (Must earn passing grade of C-/CR or better.)
C1. Arts	
C2. Hun	
	nal Lower-division Area C Course in Arts (C1) or Humanities (C2) (6 units): Social Sciences - Minimum of two different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)
□ D1.	
□ D2.	
	Area E (3 units): Lifelong Learning and Self-Development
□ E.	
	Area F (3 units): Ethnic Studies
□ F.	
_	mposition: Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.
☐ Second	Composition
	University Writing Requirement
UWR	
	 (American Institutions Requirement) - Two courses (6 units) covering Code Requirements of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California State & Local Government).
	,
☐ Code 1.	
☐ Code 2.	
Upper Divis	sion GE Requirements (9 units): Should be taken after completion of A1
	A2, A3, and B4 with a C- (CR)
🗆 UD-B. U	pper-division Science Inquiry and Quantitative Reasoning
UD-C.U	pper-division Arts OR Humanities
🗆 UD-D. L	Ipper-division Social Sciences
Overlay Red	quirements (9 units): Courses may be upper or lower division, and GE o
☐ Diversit	major y (Div)
☐ Diversit	y (Div)
☐ Social Ji	y (Div) ustice (SJ)
	y (Div) Ustice (SJ) ability (S)
□ Social Ji □ Sustaina	y (Div) ustice (SJ) ability (S) Elective Courses
☐ Social Ju ☐ Sustaina Choose a m	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following:
☐ Social Jo ☐ Sustaina Choose a m CHEM 100 -	y (Div) ustice (SJ) sbillity (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3 ; G.E./G.R. Area: B1, B3
☐ Social Jo ☐ Sustaina Choose a m CHEM 100 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following:
□ Social Ju □ Sustaina Choose a m CHEM 100 - CHEM 110 -	y (Div) ustice (SJ) sbillity (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3 ; G.E./G.R. Area: B1, B3
☐ Social Ju ☐ Sustaina Choose a m CHEM 100 - CHEM 110 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3
□ Social Ju □ Sustain: Choose a m CHEM 100 - CHEM 111 - CHEM 111 -	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3 ; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5 ; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: □ Sustain: □ Choose a m CHEM 100 - CHEM 110 - CHEM 111 - CHEM 112 - CS 100 - Proc	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3
□ Social Ju □ Sustain: □ Sustain: □ Choose a m CHEM 100 - CHEM 111 - CHEM 112 - CS 100 - Prc CS 101 - Coi	y (Div) Justice (SJ) Justice (SJ) Selective Courses Joinimum of 6 units from the following: Introduction to College Chemistry Units: 3 ; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3 ; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 Juntary II Units: 5 Juntary II Units: 5 Juntary II Units: 3 Juntary II Units: 4
□ Social Ju □ Sustain: □ Sustain: Choose a m CHEM 100 - CHEM 111 - CHEM 111 - CHEM 112 - CS 100 - Pro CS 101 - Coi PHYS 104 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3
□ Social Ju □ Sustain: □ Sustain: Choose a m CHEM 100 - CHEM 110 - CHEM 111 - CHEM 112 - CS 100 - Proc CS 101 - Coi PHYS 104 - PHYS 105 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Vusical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3
□ Social Ju □ Sustain: □ Sustain: Choose a m CHEM 100 - CHEM 110 - CHEM 111 - CHEM 112 - CS 100 - Proc CS 101 - Coi PHYS 104 - PHYS 105 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry of Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3
□ Social Ju □ Sustain: □ Sustain: Choose a m CHEM 100 - CHEM 110 - CHEM 111 - CHEM 112 - CS 100 - Proc CS 101 - Coi PHYS 104 - PHYS 105 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: Cheose a m CHEM 100 - CHEM 110 - CHEM 111 - CHEM 112 - CS 100 - Prc CS 101 - Coi PHYS 104 - PHYS 106 -	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry or Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 gramming for Everyone Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 100 - CHEM 111 - CHEM 111 - CHEM 112 - CS 100 - Prc CS 101 - Cor PHYS 104 - PHYS 105 - PHYS 106 - PHYS 106 - PHYS 107 - 2 CHEM 112 - C	y (Div) ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 100 - □ □ CHEM 111 - □ □ CHEM 111 - □ □ CHEM 112 - □ □ CS 100 - Pro □ SS 101 - Coi □ PHYS 105 - □ □ PHYS 106 - □ □ PHYS 107 - □ □ PHYS 108 - □	Justice (SJ) Jability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1; Diversity
□ Social JI □ Sustain: □ Sustain: □ Chem 100 - □ Chem 110 - □ Chem 111 - □ Chem 112 - □ CS 100 - Poc □ CS 100 - Coc □ PHYS 104 - □ PHYS 105 - □ PHYS 107 - □ PHYS 108 - □ PHYS 108 - □ PHYS 115 - □ PHYS 115 -	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1; Diversity Elementary Physics Units: 3; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Prc □ CS 101 - Ci □ PHYS 104 - □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 107 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 -	ustice (SJ) ability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 100 - □ CHEM 110 - □ CHEM 111 - □ CS 100 - Prc □ CS 100 - Prc □ S 100 - Pr □ S 100 -	ustice (SJ) ability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Vusical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Astronomy Laboratory Units: 1; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 100 - CHEM 111 - CHEM 111 - CHEM 112 - CS 100 - Proceed 100 - Pr	ustice (SJ) ability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry of Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pre □ CS 101 - Co □ PHYS 105 - □ PHYS 106 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 139 - □ PHYS 303 - □ ASTR 337 - □ CREATE 337	y (Div) astice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 1; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pre □ CS 101 - Co □ PHYS 105 - □ PHYS 106 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 139 - □ PHYS 303 - □ ASTR 337 - □ CREATE 337	y (Div) strice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Sescriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 1; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Proc □ CS 101 - Coi □ PHYS 104 - □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 139 - □ ASTR 337 - □ ASTR 337 -	y (Div) astice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 1; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Chem 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pre □ CS 101 - Co □ CS 101 -	y (Div) astice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 ; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 1; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Biophysics Units: 3; G.E./G.R. Area: B3 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pro □ CS 101 - Cro □ PHYS 105 - □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 139 - □ ASTR 338 - □ ASTR 339 -	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 1; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: B1 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Prc □ CS 101 - Cio □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 107 - □ PHYS 108 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 138 - □ ASTR 338 - □ ASTR 337 - □ ASTR 338 - □ ASTR 339 - □ PHYS 351 - □ ASTR 339 - □ PHYS 351 -	ustice (SJ) ability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 3; G.E./G.R. Area: B1 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CS 100 - Prc □ CS 101 - Coi □ PHYS 107 □ PHYS 107 □ PHYS 108 -	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 1; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B
□ Social JI □ Sustain: □ Sustain: □ Chem 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pre □ CS 101 - Co □ PHYS 105 - □ PHYS 106 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 339 - □ PHYS 303 - □ ASTR 338 - □ ASTR 339 - □ PHYS 330 - □ PHYS 351 - □ PHYS 360 - □ PHYS 351 - □ PHYS	ustice (SJ) ability (S) Elective Courses Inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mguter Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1 Personal Chemistry Physics Units: 3; G.E./G.R. Area: B1 Seseriptive Astronomy Units: 3; G.E./G.R. Area: B1 Extraolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B Quantum Mechanics II Units: 3 Selected Topics Units: 1
□ Social JI □ Sustain: □ Sustain: □ Chem 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - PCI □ CS 100 - PCI □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 108 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 339 - □ PHYS 331 - □ ASTR 339 - □ PHYS 351 - □ PHYS 351 - □ PHYS 360 - □ PHYS 451 - □ PHY	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Sitonomy Laboratory Units: 1; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B General Chemistry II Units: 3 Side Extrasolar Charactery Units: 3; G.E./G.R. Area: UD-B General Chemistry II Units: 3 Side Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B General Chemistry II Units: 3 Side Extrasolar Charactery Units: 3 Side Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B General Chemistry II Units: 3 Side Extrasolar Charactery Units:
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Prc □ CS 101 - Cio □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 108 - □ PHYS 138 - □ ASTR 138 - □ ASTR 138 - □ ASTR 338 - □ PHYS 351 - □ PHYS 360 - □ PHYS 460 - □ PHYS 460 - □ PHYS 460 - □ PHYS 461 - □ PHYS 46	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Astronomy Laboratory Units: 3; G.E./G.R. Area: B1 Sastronomy Laboratory Units: 3; G.E./G.R. Area: B1 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3 Selected Topics Units: 1 Electromagnetism II Units: 3 Astrophysics Units: 1 Electromagnetism II Units: 3 Astrophysics Units: 3
□ Social JI □ Sustain: □ Sustain	y (Div) strice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry of Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Viusical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 3; G.E./G.R. Area: B1 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3; G.E./G.R. Area: UD-B Quantum Mechanics II Units: 3 Astrophysics Units: 3
□ Social JI □ Sustain: □ Sustain: □ Chem 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pre □ CS 101 - Co □ PHYS 105 - □ PHYS 106 - □ PHYS 108 - □ PHYS	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1 Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1 Bescriptive Astronomy Units: 3; G.E./G.R. Area: B1 Selective Astronomy Units: 1; G.E./G.R. Area: B1 Setrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Stars and Galaxies Units: 3 Selected Topics Units: 1 Electromagnetism II Units: 3 Astrophysics Units: 3 Astrophysics Units: 3 Astrophysics Units: 3 Solid State Physics Units: 3 Solid State Physics Units: 3
□ Social JI □ Sustain: □ Sustain: □ Chem 110 - □ CHEM 111 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Pro □ CS 101 - Coi □ PHYS 104 - □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 108 - □ PHYS 108 - □ PHYS 115 - □ ASTR 138 - □ ASTR 339 - □ PHYS 303 - □ ASTR 338 - □ ASTR 339 - □ PHYS 305 - □ PHYS 305 - □ PHYS 405 - □ PHYS 461 - □ PHYS 462 - □ PHYS 462 - □ PHYS 463 - □ PHY	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry for Engineering Units: 3; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1; Sustainability Astronomy of Indigenous Cultures Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Science of Energy Units: 3; G.E./G.R. Area: B1 Biophysics Units: 3; G.E./G.R. Area: B1 Count of Indigenous Cultures Units:
□ Social JI □ Sustain: □ Sustain: □ Sustain: □ Sustain: □ CHEM 110 - □ CHEM 111 - □ CHEM 112 - □ CS 100 - Prc □ CS 101 - Cio □ PHYS 105 - □ PHYS 106 - □ PHYS 107 - □ PHYS 107 - □ PHYS 108 - □ PHYS 109 - □ PHYS 400 - □ PHYS 463 - □ PHYS 46	ustice (SJ) ability (S) Elective Courses inimum of 6 units from the following: Introduction to College Chemistry Units: 3; G.E./G.R. Area: B1, B3 General Chemistry I Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5; G.E./G.R. Area: B1, B3 General Chemistry II Units: 5 gramming for Everyone Units: 3 mputer Science I Units: 4 Musical Acoustics Units: 4; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, B3 How Things Work Units: 3; G.E./G.R. Area: B1, Sustainability Physics for Future Leaders Units: 3; G.E./G.R. Area: B1; Sustainability Science of Energy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1, B3 Descriptive Astronomy Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 3; G.E./G.R. Area: B1 Satronomy Laboratory Units: 3; G.E./G.R. Area: B1 Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Extrasolar Planets Units: 3; G.E./G.R. Area: UD-B Collected Topics Units: 3 Description

^{*}Students are required to take a minimum of 40 semester units as upper division (includes 9 units upper division GE)