

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes		
FIRST YEAR	FALL		3	ENGL 1301	Rhetoric and Composition I		010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.			
			4	MATH 2413	Calculus I	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.			
			3	HIST 1301	U.S. History I		060				
			3	XXXX X3XX	Language, Philosophy & Culture		040		See General Education Core for course options.		
			3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.		
			1	UTCH 1101	Inquiry Approaches to Teaching				Criminal background check and TB vaccine.		
					UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.	
		17 Semester Total Hours									
FIRST YEAR	SPRING		3	ENGL 1302	Rhetoric And Composition II		010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.			
			4	MATH 2414	Calculus II	C	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.			
			4	PHYS 2425	Physics for Scientists and Engineers I	C	030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).			
			3	HIST 1302	U.S. History II		060				
			1	XXXX X1XX	Integrative and Experiential Learning						
			1	UTCH 1102	Inquiry-Based Lesson Design				UTCH 1101 with a grade of 'C' or better or concurrent enrollment with UTCH 1101.		
		16 Semester Total Hours									
		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes		
SECOND YEAR	FALL		4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.			
			3	MATH 2318	Linear Algebra			MATH 2413 (or MATH 2487) with a grade of 'C' or better.			
			4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425.			
			3	POLS 2301	U.S. & Texas Government & Politics I		070				
			3	CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.			
				17 Semester Total Hours							
		SECOND YEAR	SPRING		3	MATH 3341	Differential Equations			MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
	4			PHYS 3402	Modern Physics			PHYS 2426	Physics core requirement.		
	3			UTCH 3301	Knowing and Learning in Mathematics and Science			UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1101 and/or UTCH 1102 with consent of UTeach advisor.			
	3			POLS 2302	U.S. & Texas Government & Politics II		070				
	3			XXXX X3XX	Social and Behavioral Sciences		080		See General Education Core for course options.		
		16 Semester Total Hours									

Symbols Key

Critical (!): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

Language Proficiency Requirement: Student is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits.

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
THIRD YEAR	FALL	3		MATE 3317	Perspectives in Mathematics and Science			MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.		
		3		PHYS 3301	Electromagnetic Theory I			MATH 2415 and either PHYS 2426 or PHYS 2412.	Physics core requirement.	
		3		PHYS 3311	Math Methods in Physics I			MATH 3341.	Physics core requirement.	
		3		PHYS 3303	Thermodynamics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
		3		UTCH 3302	Classroom Interactions			(a) A university grade point average of at least 2.75, (b) UTCH 3301 with a grade of 'C' or better or concurrent enrollment with UTCH 3301 with consent of UTeach advisor, and (c) positive evaluation of stage-one UTeach portfolio.		
		3		READ 4305	Content Area Literacy			Admission to COE Teacher Education Program.		
			18 Semester Total Hours							
	SPRING	3		MATH 3352	Modern Geometry I			MATH 2318 with a grade of 'C' or better.		
		4		PHYS 3404	Optics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
		3		PHYS 3330	Functions and Modeling			A grade of 'C' or better in the following: MATH 2413 (or MATH 2487) and UTCH 1102.		
				PHYS 4101	Laboratory Research			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
		2		PHYS 4201	Advanced Physics Lab			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
		3		UTCH 3303	Project-Based Instruction			(a) A university grade point average of at least 2.75, (b) UTCH 3302 with a grade of 'C' or better or concurrent enrollment with UTCH 3302 with consent of UTeach advisor, and (c) positive evaluation of the second-stage UTeach portfolio.		
			15 Semester Total Hours							
	FOURTH YEAR	FALL	3		MATH 3343	Introduction to Mathematical Software			MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
3				MATH 3361	Applied Discrete Mathematics			MATH 2318 with a grade of 'C' or better.	CapStone Course; Choose either PHYS 4101 or 4201.	
3				PHYS 3305	Classical Mechanics			PHYS 2426 and MATH 2415.	CapStone Course; Choose either PHYS 4101 or 4201. Physics core requirement.	
3				PHYS 4303	Quantum Mechanics I			PHYS 3305 and PHYS 3311.	Physics core requirement.	
				PHYS 4101	Laboratory Research			Consent of instructor.		
			12 Semester Total Hours							
SPRING		3		MATH 4337	Probability and Statistics I			MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
		3		PHYS 4392	Research Methods			Grade C or better in the following: MATH 2413 (or MATH 2487) and UTCH 1102.		
		1		UTCH 4101	Apprentice Teaching Seminar			(a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TExES examinations, and (e) acceptance of the third-stage UTeach portfolio.		
		6		UTCH 4601	Apprentice Teaching			(a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) successful completion of PPR and content TExES examinations, and (d) acceptance of the third-stage UTeach portfolio.		
				13 Semester Total Hours						

Progression Requirements: Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advance hours, as recommended by advisor.

124 TOTAL HOURS

(68) TOTAL ADVANCED HOURS

Approved: Wednesday, March 12, 2014

Revised: Thursday, August 13, 2015

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL		3	ENGL 1301	Rhetoric and Composition I		010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.		
			4	MATH 2413	Calculus I	c	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.		
			3	HIST 1301	U.S. History I		060			
			1	XXXX X1XX	Integrative and Experiential Learning					
			3	XXXX X3XX	Creative Arts				See General Education Core for course options.	
				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.	
	14 Semester Total Hours									
		SPRING		3	ENGL 1302	Rhetoric And Composition II		010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
				4	MATH 2414	Calculus II	c	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
				4	PHYS 2425	Physics for Scientists and Engineers I	c	030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).	
			3	HIST 1302	U.S. History II		060			
			3	CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.		
17 Semester Total Hours										
SECOND YEAR	FALL		4	MATH 2415	Calculus III	c		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
			4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425.		
			3	POLS 2301	U.S. & Texas Government & Politics I		070			
			3	XXXX X3XX	Minor					
		14 Semester Total Hours								
		SPRING		3	MATH 3341	Differential Equations			MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
				3	PHYS 3305	Classical Mechanics			PHYS 2426 & MATH 2415	Physics core requirement.
				4	PHYS 3402	Modern Physics			PHYS 2426.	Physics core requirement.
				3	POLS 2302	U.S. & Texas Government & Politics II		070		
				3	XXXX X3XX	Social and Behavioral Sciences		080		See General Education Core for course options.
16 Semester Total Hours										

Symbols Key

Critical (!!): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

Language Proficiency Requirement: Student is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits.

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
THIRD YEAR	FALL		3	PHYS 3303	Thermodynamics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
			3	PHYS 3306	Introduction to Biophysics			PHYS 1402 or PHYS 2426.	Meets concentration req.	
			3	PHYS 3311	Math Methods in Physics I			MATH 3341.	Physics core requirement.	
			3	XXXX X3XX	Language, Philosophy & Culture				See General Education Core for course options.	
			3	XXXX X3XX	Minor					
	15 Semester Total Hours									
	SPRING		4	PHYS 3404	Optics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
			3	PHYS 3309	Introduction to Medical Imaging			MATH 1314 and either PHYS 1402, PHYS 2426, PSCI 1422, CHEM 1312, or BIOL 1407 (or BIOL 1488).	Meets concentration req.	
			3	PHYS 4305	Statistical Mechanics			PHYS 3303 and PHYS 3311.	Meets concentration req.	
			3	XXXX X3XX	Minor (Advanced)					
		3	XXXX X3XX	Minor						
16 Semester Total Hours										
FOURTH YEAR	FALL		3	PHYS 4303	Quantum Mechanics I			PHYS 3305 and PHYS 3311.	Physics core requirement.	
				PHYS 4101	Laboratory Research			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
			2	PHYS 4201	Advanced Physics Lab			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
			3	PHYS 3301	Electromagnetic Theory I			MATH 2415 and either PHYS 2426 or PHYS 2412.	Physics core requirement.	
			3	PHYS 3310	Radiation Biophysics			PHYS 1402 or PHYS 2426.	Meets concentration req.	
		3	XXXX X3XX	Minor (Advanced)						
	14 Semester Total Hours									
	SPRING		3	PHYS 3302	Electromagnetic Theory II			PHYS 3301.	Meets concentration req.	
				PHYS 4101	Laboratory Research			Consent of instructor.	Not needed if PHYS 4201 taken.	
			3	PHYS 4304	Quantum Mechanics II			PHYS 4303.	Meets concentration req.	
		3	PHYS 4312	Introductory Nuclear Engineering and Health Physics Concepts			PHYS 3402 and PHYS 4309; or consent of the instructor.	Meets concentration req.		
		3	XXXX X3XX	Minor (Advanced)						
	3	XXXX X3XX	Free Elective							
15 Semester Total Hours										

Graduation Requirements

121 TOTAL HOURS
(58) TOTAL ADVANCED HOURS

Approved: Wednesday, March 12, 2014
Revised: Thursday, August 13, 2015

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL		3	ENGL 1301	Rhetoric and Composition I		010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.		
			4	MATH 2413	Calculus I	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.		
			3	HIST 1301	U.S. History I		060			
			1	XXXX X1XX	Integrative and Experiential Learning		090			
			3	XXXX X3XX	Creative Arts					
					UNIV 1301	Learning Framework			See General Education Core for course options. Only if required, based on ACT/SAT and high school rank.	
	14 Semester Total Hours									
		SPRING		3	ENGL 1302	Rhetoric And Composition II		010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
			4	MATH 2414	Calculus II	C	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
			4	PHYS 2425	Physics for Scientists and Engineers I	C	030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).		
	3		HIST 1302	U.S. History II		060				
	3		CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.			
17 Semester Total Hours										
SECOND YEAR	FALL		4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
			4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425.		
			3	POLS 2301	U.S. & Texas Government & Politics I		070			
			3	XXXX X3XX	Minor					
			3	XXXX X3XX	Free Elective					
	17 Semester Total Hours									
		SPRING		3	MATH 3341	Differential Equations			MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
			3	PHYS 3305	Classical Mechanics			PHYS 2426 & MATH 2415	Physics core requirement.	
			4	PHYS 3402	Modern Physics			PHYS 2426	Physics core requirement.	
			3	POLS 2302	U.S. & Texas Government & Politics II		070			
	3		XXXX X3XX	Social and Behavioral Sciences		080		See General Education Core for course options.		
16 Semester Total Hours										

Symbols Key

Critical (!): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

Language Proficiency Requirement: Student is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits.

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
THIRD YEAR	FALL	3		PHYS 3303	Thermodynamics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
		3		PHYS 3311	Math Methods in Physics I			MATH 3341.	Physics core requirement.	
		3		PHYS X3XX	Major Advanced Elective				See Degree Plan for course options.	
		3		PHYS X3XX	Major Advanced Elective				See Degree Plan for course options.	
		3		XXXX X3XX	Minor					
	15 Semester Total Hours									
	SPRING	4		PHYS 3404	Optics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.	
		3		PHYS 4305	Statistical Mechanics			PHYS 3303 and PHYS 3311.		
		3		PHYS X3XX	Major Advanced Elective				See Degree Plan for course options.	
		3		XXXX X3XX	Language, Philosophy & Culture		040		See General Education Core for course options.	
3			XXXX X3XX	Minor						
16 Semester Total Hours										
FOURTH YEAR	FALL	3		PHYS 4303	Quantum Mechanics I			PHYS 3305 and PHYS 3311.	Physics core requirement.	
				PHYS 4101	Laboratory Research			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
		2		PHYS 4201	Advanced Physics Lab			Consent of instructor.	CapStone Course; Choose either PHYS 4101 or 4201.	
		3		PHYS 3301	Electromagnetic Theory I			MATH 2415 and either PHYS 2426 or PHYS 2412.	Physics core requirement.	
		3		XXXX X3XX	Minor (Advanced)					
		3		XXXX X3XX	Minor (Advanced)					
	14 Semester Total Hours									
	SPRING	3		PHYS 3302	Electromagnetic Theory II			PHYS 3301.		
				PHYS 4101	Laboratory Research			Consent of instructor.	Not needed if PHYS 4201 taken.	
		3		PHYS 4304	Quantum Mechanics II			PHYS 4303.		
3			PHYS X3XX	Major Advanced Elective				See Degree Plan for course options.		
3		XXXX X3XX	Minor (Advanced)							
12 Semester Total Hours										

Graduation Requirements

121 TOTAL HOURS
(58) TOTAL ADVANCED HOURS

Approved: October 2015
Revised: Thursday, August 13, 2015