

(Applied Mathematics Concentration)

		- 11	6	, , , ,	Min.		Describing	A distance   Nicker
	!	Н	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
		3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
	<b>ا</b> ۔ !	4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	FALL	3	HIST 1301	U.S. History I		060		
AR	_	3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
ΥE		3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.
FIRST			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
		16	Semester Tota	Hours				
		3	ENGL 1302	Rhetoric And Composition II	С	010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
	<u>.</u>	4	MATH 2414	Calculus II	С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPRING 	3	MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPR	3	HIST 1302	U.S. History II		060		
		3	XXXX X3XX	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301
		16	Semester Tota	l Hours				
	1	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	!	4	MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
	FALL	3	POLS 2301	U.S. & Texas Government & Politics I		070		
AR	_	4	XXXX X4XX	Life and Physical Sciences I		030		Recommended: PHYS 2425
ΥE		3		Language, Philosophy & Culture		040		See General Education Core for course options.
OND		17	Semester Tota	Hours				
SECO		3	MATH 3343	Introduction to Mathematical Software	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
	<u>u</u> !	3	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
	SPRIN	3	POLS 2302	U.S. & Texas Government & Politics II		070		
	SP	1	XXXX X1XX	Integrative and Experiential Learning		090		
		4	XXXX X4XX	Life and Physical Sciences II		030		Recommended: PHYS 2426
		14	Semester Tota	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; Language Proficiency Requirement: Student is required to demonstrate 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.

	!	H Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	1	3 MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	3	3 MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
FALL	1	3 MATH X3XX	Major Advanced Elective	С			See Degree Plan for course options.
₹	3	3 MATH X3XX	Major Advanced Elective	С			See Degree Plan for course options.
œ	3	3 XXXX X3XX	Free Elective				
YEA	1	L5 Semester Tota	al Hours				
THIRD Y	3	3 MATH 3372	Real Analysis I	с		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
		3 MATH 4337	Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
SPRING	3	3 MATH 3349	Numerical Methods	С		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
•		3 MATH X3XX	Major Advanced Elective	С			See Degree Plan for course options.
	3	3 XXXX X3XX	Free Elective				
	1	L5 Semester Tota	al Hours				
	!	H Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	3 MATH 4390	Mathematics Project	С		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
<u>ب</u> ب	3	3 MATH 3331	Applied Statistics I	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
YEAR	3		Major Advanced Elective	С			See Degree Plan for course options.
<del>∑</del>			Free Advanced Elective				
URTH			Free Elective				
į į		L5 Semester Tot					
요			Major Advanced Elective	С			See Degree Plan for course options.
2	- 13		Major Advanced Elective	С			See Degree Plan for course options.
SPRING	1	-	Free Advanced Elective				
S			Free Elective				
	1	12 Semester Tota	al Hours				

120 TOTAL HOURS

Approved: Friday, October 16, 2015 (54) TOTAL ADVANCED HOURS Revised: Monday, August 03, 2015

> 190 Page 2 of 2



(Economics Concentration)

	!	Н	Α	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3		ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
		4		MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	HI	3		HIST 1301	U.S. History I		060		
AR		3		XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
YE		3		ECON 2301	Principles of Macroeconomics		080		
FIRST				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
		16		emester Total					
		3		ENGL 1302	Rhetoric And Composition II	С		A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
	<u>ا</u>	4			Calculus II	С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPRING	3		MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SP _	3	_		U.S. History II		060		
		3			Principles of Microeconomics	С		ECON 2301 with a grade of 'C' or better.	
		16		emester Total		Min			
			Α		Course Title	Grade		Prerequisite	Additional Notes
	!	4		MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	FALL	3	(3)	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
AR	7	3		POLS 2301	U.S. & Texas Government & Politics I		070		
Ϋ́E		4			Life and Physical Sciences I		030		Recommended: PHYS 2425
N N		14		emester Total					
8	!				Introduction to Mathematical Software	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or	
SE	ے ق				Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
	SPRING	3			U.S. & Texas Government & Politics II		070		
	SP	1		XXXX X1XX	Integrative and Experiential Learning	-	090		
		4		XXXX X4XX	Life and Physical Sciences II		030		
		14	(6) <b>S</b> E	emester 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; Language Proficiency Requirement: Student is required to demonstrate 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.

	!	Н	Α	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	(3)	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
		3	(3)	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
	FALL	3	(3)	ECON 3351	Macroeconomic Theory			ECON 2301 and ECON 2302.	
	₹	3		XXXX X3XX	Language, Philosophy & Culture		040		See General Education Core for course options.
AR		3	(0)	XXXX X3XX	Free Elective				
Ϋ́Ε	1	5	(9)	Semester Tota	l Hours				
THIRD		3	(3)	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	٥	3	(3)	MATH 4337	Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	SPRING	3	(3)	ECON 3352	Microeconomic Theory	С		ECON 2301 and ECON 2302.	
	S	3		XXXX X3XX	Free Elective				
		3		XXXX X3XX	Free Elective				
	1	5	(9)	Semester Tota	l Hours				
	!	Н	Α	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	(3)	MATH 4390	Mathematics Project	С		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
		3	(3)	MATH X3XX	Major Advanced Elective	С			
~	FALL	3	(3)	ECON 3341	Econometrics	С		ECON 2301, ECON 2302, and QUMT 2341.	
图		3	(3)	XXXX X3XX	Free Advanced Elective				
Έ		3			Free Elective				
OURTH		15	(12)	Semester Tota					
ğ			(3)		Studies in Economics	С			See Degree Plan for course options.
	<u> </u>	3	(3)		Business and Economics Forecasting	С		ECON 3341.	See Degree Plan for course options.
	PRING	3			Creative Arts	С	050		See General Education Core for course options.
	SPR _	3	(3)		Free Advanced Elective				
	٠,	3			Free Elective				
		15	(9)	Semester Tota	l Hours				

120TOTAL HOURSApproved: Friday, October 16, 2015(48)TOTAL ADVANCED HOURSRevised: Monday, August 03, 2015



# Bachelor of Science (BS)

Mathematics

(Middle School Mathematics Concentration)

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
	!	4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	FALL	3	HIST 1301	U.S. History I		060		
	4	1	UTCH 1101	Inquiry Approaches to Teaching	С		Criminal background check and TB vaccine.	
~		3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
EA		3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.
FIRST			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
	4	_	Semester Tota					
	L	3		Rhetoric And Composition II	С		A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
	1	4	MATH 2414		С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	, <u> </u>	3		Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPRING	3	HIST 1302	U.S. History II		060		
	2 2	1	UTCH 1102	Inquiry-Based Lesson Design	С		UTCH 1101 with a grade of 'C' or better or concurrent enrollment with UTCH 1101.	
		3	XXXX X3XX	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301
		17	Semester Tota					
		Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	1	3		Fundamentals of Mathematics I	С		MATH 1314 or MATH 1414 with a grade of 'C' or better.	
		4	MATH 2415		С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	4	3		U.S. & Texas Government & Politics I		070		
	FALL	4		Life and Physical Sciences I		030		Recommended: PHYS 2425
		3	1	Language, Philosophy & Culture		040		See General Education Core for course options.
AR	L	17	Semester Tota					
¥.						ance	into UTeach Program required: See UTeach website for requirements.	
N N		3		Fundamentals of Mathematics II	С		MATH 1350 with a grade of 'C' or better.	
E		3		Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
S		3	POLS 2302	U.S. & Texas Government & Politics II		070		
	SPRING	3	UTCH 3301	Knowing and Learning in Mathematics and Science	С		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.	
		1	XXXX X1XX	Integrative and Experiential Learning		090		
		4	XXXX X4XX	Life and Physical Sciences II		030		Recommended: PHYS 2426
		17	Semester Tota	l Hours				

#### Symbols Key

Critical ('!'): sequence sensitive course.

S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; Language Proficiency Requirement: Student is required to demonstrate Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative language proficiency in a language other than English at the Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and undergraduate level equivalent to a minimum of six credits. Behavioral Sciences; 090 - Computer Application; 090 - Interdisciplinary;090 -Science Labs; 090 - Wellness.

	!	Н	Course #	Course Title	Min. Grade	Frerequisite	Additional Notes
		3	MATH 3341	Differential Equations	С	MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or	
				·		better.	
		3	MATH 3352	Modern Geometry I	С	MATH 2318 with a grade of 'C' or better.	
		3	MATE 3301	Fundamentals of Middle School Mathematics	С	MATH 1351 with a grade of 'C' or better.	
	FALL	3	MATE 3321	Functions and Modeling	С	MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better.	
THIRD YEAR		3	UTCH 3302	Classroom Interactions	С	(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.	
		15	Semester Tota	l Hours			
		3	MATH 3363	Modern Algebra I	С	MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	(D	3	MATH 3372	Real Analysis I	С	MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	SPRING	3	MATE 3302	Fundamentals of Measurement and Geometry I	С	MATH 1351 with a grade of 'C' or better.	
		3		Fundamentals of Algebraic Structures	С	MATH 1351 with a grade of 'C' or better.	
		3		Content Area Literacy		Admission to COE Teacher Education Program.	
			Semester Tota		Min		. 1 100
F		Н	Course #	Course Title	Grade	Prerequisite	Additional Notes
						TANKE OF THE STATE	
		3	MATH 4390	Mathematics Project	С	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
		3	MATH 4390 MATE 3303	Mathematics Project  Fundamentals of Measurement and Geometry II	С		
			MATE 3303	Fundamentals of Measurement and		all with grades of 'C' or better.	
AR		3	MATE 3303 MATE 3317	Fundamentals of Measurement and Geometry II	С	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.	
YEAR		3 3	MATE 3303 MATE 3317	Fundamentals of Measurement and Geometry II Perspectives in Mathematics and Science Project-Based Instruction	С	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  (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	
TH YEAR		3 3	MATE 3303 MATE 3317 UTCH 3303 Semester Tota	Fundamentals of Measurement and Geometry II Perspectives in Mathematics and Science Project-Based Instruction	С	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  (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	
FOURTH YEAR		3 3	MATE 3303 MATE 3317 UTCH 3303 Semester Tota	Fundamentals of Measurement and Geometry II  Perspectives in Mathematics and Science  Project-Based Instruction	ССС	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  (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.	
FOURTH YEAR	SPRING	3 3 3	MATE 3303  MATE 3317  UTCH 3303  Semester Tota  MATH 4337	Fundamentals of Measurement and Geometry II  Perspectives in Mathematics and Science  Project-Based Instruction  I Hours  Probability and Statistics I  Research Methods in Middle School	c c c	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  (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.  MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
FOURTH YEAR	SPRING	3 3 3 3 3 1	MATE 3303  MATE 3317  UTCH 3303  Semester Tota  MATH 4337  MATE 4319  UTCH 4101	Fundamentals of Measurement and Geometry II  Perspectives in Mathematics and Science  Project-Based Instruction  I Hours  Probability and Statistics I  Research Methods in Middle School Mathematics  Apprentice Teaching Seminar	c c c	all with grades of 'C' or better.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  (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.  MATH 2414 (or MATH 2488) with a grade of 'C' or better.  Consent of instructor.  (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	

**Progression requirements:** Admission to the College of Education 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 advanced hours, as recommended by advisor.

Graduation Requirements: The student must complete all these major course requirements and all MATH courses with grades of 'C' or better and have with a GPA for the major of 2.5 or better.

123 TOTAL HOURS

(61) TOTAL ADVANCED HOURS

Approved: Friday, October 16, 2015

Revised: Tuesday, August 11, 2015



(Pure Mathematics Concentration)

		Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
	- 1	4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	FALL	3	HIST 1301	U.S. History I		060		
AR		3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
ΥE		3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.
FIRST				Learning Framework				Only if required, based on ACT/SAT and high school rank.
		16	Semester Tota					
		3		Rhetoric And Composition II	С		A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
	ا ن	4	MATH 2414		С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPRING	3		Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPI	3		U.S. History II		060		
		3		Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301
			Semester Tota		Min	_		
	. !	Н	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
	!	4	MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	!	3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
~	FALL	3	POLS 2301	U.S. & Texas Government & Politics I		070		
/EAR		4	XXXX X4XX	Life and Physical Sciences I		030		Recommended: PHYS 2425
<u>6</u>		3		Language, Philosophy & Culture		040		See General Education Core for course options.
OND		17	Semester Tota					
SEC		3		Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
	<u>ا</u>	3		Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
	SPRING	3		U.S. & Texas Government & Politics II		070		
	SPF	1	XXXX X1XX	Integrative and Experiential Learning		090		
		4		Life and Physical Sciences II		030		Recommended: PHYS 2426
		14	Semester Tota	l Hours				

#### Symbols Key

Critical ('!'): sequence sensitive course.

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

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.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 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.

	! H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	3	MATH 3365	Number Theory	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
FALL	3	MATH 4342	Complex Variables	С		MATH 2415 with a grade of 'C' or better.	
Æ	3	MATH X3XX	Major Advanced Elective	С	#REF!		Recommended: MATH 3343
¥	3	XXXX X3XX	Free Elective				
YEAI	15	Semester Tota	l Hours				
THIRD	3	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	3	MATH 4337	Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
SPRING	3	MATH 3349	Numerical Methods	С		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
	3	MATH 43XX	Major Advanced Elective	С			See Degree Plan for course options.
	3	XXXX X3XX	Free Elective				
	15	Semester Tota					
	! H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	MATH 4390	Mathematics Project	С		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
EAR	3	MATH 4355	Topology	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
YEAR	3	MATH 43XX	Major Advanced Elective	С			See Degree Plan for course options.
폰	_		Free Advanced Elective				
OURTH	3		Free Elective				
ē	_	Semester Tota					
	3		Major Advanced Elective	С			See Degree Plan for course options.
Se l	3		Major Advanced Elective	С			See Degree Plan for course options.
SPRING	3	-	Free Advanced Elective				
S	3		Free Elective				
	12	Semester Tota	I Hours				

Graduation Requirements: The student must complete all these major course requirements and all MATH courses with grades of 'C' or better and have with a GPA for the major of 2.5 or better.

120 TOTAL HOURS

Approved: Friday, October 16, 2015

(54) TOTAL ADVANCED HOURS

Revised: Monday, August 03, 2015



(Science & Engineering Concentration)

				,	Min		Concentration	
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. $ \label{eq:continuous} $	
		4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	FALL	3	HIST 1301	U.S. History I		060		
AR		3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
YE		3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.
FIRST			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
		16	Semester Tota	Hours				
		3	ENGL 1302	Rhetoric And Composition II	С	010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
	(B	4	MATH 2414	Calculus II	С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	Ĭ	3	MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	SPRING	3	HIST 1302	U.S. History II		060		
	Ĭ	3	XXXX X3XX	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301
		16 9	Semester Tota	Hours				
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	!	4	MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	!	3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
œ	FALL	3	POLS 2301	U.S. & Texas Government & Politics I		070		
ΈA		4	XXXX X4XX	Life and Physical Sciences I		030		Recommended: PHYS 2425
۵		3	XXXX X3XX	Language, Philosophy & Culture		040		See General Education Core for course options.
NO		17 9	Semester Tota	Hours				
EC	!	3		Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
8	(n 1	3		Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
	Ž_	3	POLS 2302	U.S. & Texas Government & Politics II		070		
	SPRING	1	XXXX X1XX	Integrative and Experiential Learning		090		
		4		Life and Physical Sciences II		030		Recommended: PHYS 2426
		14 9	Semester Tota	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; Language Proficiency Requirement: Student is required to demonstrate 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.

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
		3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
	FALL	3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
		3	XXXX X3XX	Major Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
YEAR		3		Free Elective				
é		15 9	Semester Total	Hours				
THIRD		3	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of $^{\rm i}{\rm C}^{\rm i}$ or better.	
		3	MATH 4337	Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	SPRING	3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
	S	3		Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
		3	XXXX X3XX					
		15 9	Semester Total					
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 4390	Mathematics Project	С		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
		3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
YEAR	FALL	3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
×		-		Free Advanced Elective				
Ė		3	XXXX X3XX					
FOURTH		15 9	Semester Total	Hours				
		3	XXXX X3XX	Major Advanced Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
	SPRING	3	XXXX X3XX	Major Elective				College of Sciences or College Engineering & Computer Science; excluding MATH or MATE
	S	3		Free Advanced Elective				
		3	XXXX X3XX					
		12 9	Semester Total	Hours				

120 TOTAL HOURS

Approved: Friday, October 16, 2015 (48) TOTAL ADVANCED HOURS Revised: Monday, August 03, 2015

> 198 Page 2 of 2



(Secondary Mathematics Concentration)

	_		ы	Course #	Course Title	Min.		·	A dalation of Notice
-	_	1	Н	Course #	Course Title	Grade		Prerequisite	Additional Notes
			3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
		!	4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	FALL		3	HIST 1301	U.S. History I		060		
	₩.	!	1	UTCH 1101	Inquiry Approaches to Teaching	С		Criminal background check and TB vaccine.	
~			3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170
ΈĀ			3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.
IRST \				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
			17 9	Semester Total	Hours				
			3	ENGL 1302	Rhetoric And Composition II	С	010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
		!	4	MATH 2414	Calculus II	С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	(5	!	3	MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	Ĭ		3	HIST 1302	U.S. History II		060		
	SPRING	!	1	UTCH 1102	Inquiry-Based Lesson Design	С		UTCH 1101 with a grade of 'C' or better or concurrent enrollment with UTCH 1101.	
			3	XXXX X3XX	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301
			17 9	Semester Total	l Hours				
		!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		!	4	MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		!	3	MATE 3321	Functions and Modeling	С		MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better.	
	FALL		3	POLS 2301	U.S. & Texas Government & Politics I		070		
	\$		4	XXXX X4XX	Life and Physical Sciences I		030		Recommended: PHYS 2425
œ			3	XXXX X3XX	Language, Philosophy & Culture		040		See General Education Core for course options.
ΕĀ			17 9	Semester Total					
۵						lmitt	ance	into UTeach Program required: See UTeach website for requirements	
S		!	3	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
SEC		!	3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
	ច្		3	POLS 2302	U.S. & Texas Government & Politics II		070		
	SPRING	!	3	UTCH 3301	Knowing and Learning in Mathematics and Science	С		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.	
			4	XXXX X4XX	Life and Physical Sciences II		030		Recommended: PHYS 2426
			16 0	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 Language Proficiency Requirement: Student is required to demonstrate language 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.

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
		3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
		3	MATE 3317	Perspectives in Mathematics and Science	С		MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	
3D YEAR	FALL	3	UTCH 3302	Classroom Interactions	С		(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.	
屋		1		Integrative and Experiential Learning		090		
			Semester Tota					
		3	MATH 3326	History of Mathematics	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	(2)	3	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	SPRING	3		Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	MATE 3322	Secondary Mathematics in a Technological Env	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	READ 4305	Content Area Literacy			Admission to COE Teacher Education Program.	
			Semester Tota	l Hours				
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 3361	Applied Discrete Mathematics	С		MATH 2318 with a grade of 'C' or better.	
		3	MATH 4200	Mathamatica Ducient	с		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH,	
				Mathematics Project			all with grades of 'C' or better.	
				Research Methods in Secondary Mathematics	С		all with grades of 'C' or better.  MATE 3317 or PHIL 3317 with a grade of "C" or better.	
	FALL	3	MATE 4329	·			-	
JR	FALL	3	MATE 4329	Research Methods in Secondary Mathematics  Project-Based Instruction	С		MATE 3317 or PHIL 3317 with a grade of "C" or better.  (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	
TH YEAR	FALL	3	MATE 4329  UTCH 3303  Semester Tota	Research Methods in Secondary Mathematics  Project-Based Instruction	С		MATE 3317 or PHIL 3317 with a grade of "C" or better.  (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	
FOURTH YEAR	FALL	3 3	MATE 4329  UTCH 3303  Semester Tota  MATH 3365	Research Methods in Secondary Mathematics Project-Based Instruction	С		MATE 3317 or PHIL 3317 with a grade of "C" or better.  (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.	
FOURTH YEAR	SPRING	3 3 12 3	MATE 4329  UTCH 3303  Semester Tota  MATH 3365  MATE 4423	Research Methods in Secondary Mathematics Project-Based Instruction  I Hours  Number Theory	c c		MATE 3317 or PHIL 3317 with a grade of "C" or better.  (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.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
FOURTH YEAR		3 3 3 4 1	MATE 4329  UTCH 3303  Semester Tota  MATH 3365  MATE 4423  UTCH 4101	Research Methods in Secondary Mathematics  Project-Based Instruction  I Hours  Number Theory  Advanced Studies in Secondary Mathematics  Apprentice Teaching Seminar  Apprentice Teaching	c c		MATE 3317 or PHIL 3317 with a grade of "C" or better.  (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.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.  MATH 3352 and MATH 3363, each with a grade of 'C' or better.  (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	

Progression requirements: Admission to the College of Education 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 3 advanced hours, as recommended by advisor.

Graduation Requirements: The student must complete all these major course requirements and all MATH and MATE courses with grades of 'C' or better and have with a GPA for the major of 2.5 or better.

121 TOTAL HOURS

(65) TOTAL ADVANCED HOURS

Approved: Friday, October 16, 2015

Revised: Tuesday, August 11, 2015



(Statistics Concentration)

	Į.	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes			
		3	ENGL 1301	Rhetoric and Composition I	С	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.				
	!	4	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.				
	H H	3	HIST 1301	U.S. History I		060					
AR		3	XXXX X3XX	Integrative and Experiential Learning		090		Recommended: CSCI 1380 or CSCI 1370/1170			
. YE		3	XXXX X3XX	Creative Arts		050		See General Education Core for course options.			
FIRST			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.			
		16 Semester Total Hours									
		3		Rhetoric And Composition II	С		A grade of 'C' or better in ENGL 1301 or ENGL 1387.				
	<u>ا</u>	4	MATH 2414	Calculus II	С	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.				
	<u> </u>	3	MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.				
	SPRING -	3		U.S. History II		060					
		3		Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301			
		16	Semester Tota	l Hours							
	!	Н	Course #	Course Title	Min. Grade		Prerequisite	Additional Notes			
	!	3	MATH 1342	Elementary Statistical Methods	С	020	College Ready TSI status in Mathematics.				
	!	4	MATH 2415		С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.				
	-	3	POLS 2301	U.S. & Texas Government & Politics I		070					
~		4	XXXX X4XX	Life and Physical Sciences I		030		Recommended: PHYS 2425			
YEA		3		Language, Philosophy & Culture		040		See General Education Core for course options.			
	17 Semester Total Hours										
SECON	!	3	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.				
	ַ יַ	3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.				
	SPRING	3	POLS 2302	U.S. & Texas Government & Politics II		070					
	ş	1	XXXX X1XX	Integrative and Experiential Learning		090					
		4	XXXX X4XX	Life and Physical Sciences II		030		Recommended: PHYS 2426			
		14	Semester Tota	l Hours	•	,					

#### Symbols Key

Critical ('!'): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 -S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; Language Proficiency Requirement: Student is required to demonstrate Creative Arts; 060 - American History; 070 - Government/Political Science; 080 -Social and Behavioral Sciences; 090 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 3331	Applied Statistics I	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
		3	MATH 3334	Sampling	С		MATH 1342 (or MATH 1387), MATH 1343, or MATH 3331, with a grade of 'C' or better.	
	FALL	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
		3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
<b>∞</b>		3	XXXX X3XX	Free Elective				
YEAR		15	Semester Tota	l Hours				
THIRD Y		3	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
F		3	MATH 3332	Applied Statistics II	С		MATH 3331 with a grade of 'C' or better.	
	SPRING	3	MATH 3335	Applied Regression	С		MATH 1342 (or MATH 1387), MATH 1343, or MATH 3331, with a grade of 'C' or better.	
	S	3		Introduction to Mathematical Software	С		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
		3	XXXX X3XX	Free Elective				
		15	Semester Tota	l Hours				
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MATH 4390	Mathematics Project	С		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
	!	3	MATH 4337	Probability and Statistics I	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
<u>~</u>	FALL	3	MATH X3XX	Major Advanced Elective	С			See Degree Plan for course options.
Ø		3	XXXX X3XX	Free Advanced Elective				
£		3		Free Elective				
OURTH		15	Semester Tota					
Ö		3	MATH 4338	Probability and Statistics II	С		MATH 4337 with a grade of 'C' or better.	
	SPRING	3		Numerical Methods	С		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
	SPR	3		Free Advanced Elective				
		3		Free Elective				
		12	Semester Tota	l Hours				

120 TOTAL HOURS

Approved: Friday, October 16, 2015

(51) TOTAL ADVANCED HOURS

Revised: Monday, August 03, 2015