## The University of Texas Rio Grande Valley

## **Bachelor of Interdisciplinary Studies (BIS)**

Middle School Mathematics

## Mathematics 4th-8th

Visit         Column (Core)         Column (Core) <th>-</th> <th></th> <th>Mathematics 4</th> <th></th> <th>un</th> <th></th> <th></th>	-		Mathematics 4		un		
1     MATH 1950     Fundamentals of Mathematics I     C     A     MATH 1954 of MATH 1414 with a gase of C or better.     Define a gase of C or better.       1     CRCcost I     Amorean Hearty (Creat)     C     C     To a gase of C or better.     Define a gase of C or better.       1     UTCH 1101     Implify Approaches to Tracking     C     C     To a gase of C or better.     Define a gase of C or better.     Define a gase of C or better.       1     UTCH 1101     Implify Approaches to Tracking     C     C     C     Define a gase of C or better.     Define a gas	: H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3     Chosen 1     Amarican History (Cool)     Call     Soci Concurse Environment Section     Soci Concurse Environment Section     Soci Concurse Environment Section       1     UTCH 1101     Inguity Approaches to Teaching     C     0     To Vacative Environment Section     Concurse Environment Section       1     UTCH 1101     Inguity Approaches to Teaching     C     0     Concurse Environment Section     Concurse Environment Section       1     UTCH 1101     Inguity Approaches to Teaching     C     0     Concurse Environment Section     Concurse Environment Section       1     UTCH 1101     Inguity Section     1001     Concurse Environment Section     Concurse Environment Section     Concurse Environment Section     Concurse Environment Section       1     UTCH 1102     Inguity Section     Concurse Environment Section     Concurse Environment Section     Concurse Environment Section     Concurse Environment Section     Concurse Environment Section       1     UTCH 1102     Inguity Section     Concurse     Concurse Environment Section       1     UTCH 1110     Inguity Section     Concurse     Section     Concurse Environment Section     Concurse Environment Section	3	Choose 1	Communication (Core)	С	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1301
Nome     Nome     Advector     Options: HIST 130 c MitENDMAGE 2327       1     UCH 1010     InclurA properties to Endoring     C     To Vaccine       3     CSC 1380     Computer Science I     C     DO       4     MATH 2412     Proceous     Science I     O       7     Science I     Science I     Science I     Science I       10     UWW     All Larging Framework Academic of Computer Science I     Science I     Science I       10     UWW     All Larging Framework Academic of Computer Science I     Science I     Science I       10     UWW     All Larging Framework Academic of Computer Science I     Science I     Science I       11     UWW     All Larging Framework Academic of Computer Science I     Science II     Science III Science IIII Science IIII Science IIII Science IIII Science IIII Science IIII Science IIIII Science IIIII Science IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	3	MATH 1350	Fundamentals of Mathematics I	С		MATH 1314 or MATH 1414 with a grade of 'C' or better.	
Normalize       Normalize       Normalize       Normalize       Normalize         3       CSC1 1990       Computer Same I       Computer Same IIII       Computer Same IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	3	Choose 1	American History (Core)		060		
Note         Number of the second	· 1	UTCH 1101	Inquiry Approaches to Teaching	С		TB Vaccine	
Note         Note <th< td=""><td><sup>4</sup> 3</td><td>CSCI 1380</td><td>Computer Science I</td><td></td><td>090</td><td>Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.</td><td></td></th<>	<sup>4</sup> 3	CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	
UNN       Addemic and Garer Succes       1001       C       An equired, Sast and or definitions of more formation of more definitions arring, NM KRUD, Fight Role on MR, Fight Role	4	MATH 2412	Precalculus	С	020	MATH 1314 or MATH 1414 with a grade of 'C' or better; or passing the College Algebra Exemption Test administered by the Department of Mathematics.	
3       Choose 1       Communication (Core)       C       010       For all 010 courses: Statisfactory scores on ENGL portion of ACT test or TSI reading/writing see General Education Core for more details options: ENGL 1302 v ENGL 1302 v ENGL 1302       see General Education Core for more details options: ENGL 1302 v ENGL 1302		UNIV	Academic and Career Success 1001				As required, based on credit hours earned, TSI status, High school rank, major declaration
NATH 1351       Fundamentals of Mathematics II       C       MATH 1351       Fundamentals of Mathematics II       C       MATH 1351       Fundamentals of Mathematics II       C       MATH 1350       What packs of C'or better in ENGL 1301.       Options: ENGL 1302 of ENGL 1302 of ENGL 1302         1       Choose 1       American History (Core)       C       000       See General Education Core for more details.         1       UTCH 1102       Inquir/Education 16 Economics of Principles of Mathematics.       V       MATH 2412 with a grade of 'C' or better or passing the Preceiculus Exemption Test administered by the Department of Mathematics.       Econ 1301 or ECON 2301       Mittoduction to Economics or Principles of Mathematics.       V         1       Core of Core Tite       Core Tite       Core Principles of Mathematics.       C       MATH 2413 and concurrent encillent in MATH 2414.       Economics or Principles of Mathematics.         1       Core of Core Tite       Core Principles of Mathematics.       C       MATH 1351 with a grade of C' or better.       Attraction Core for more details.         3       ENGL 1302       Erde Value Core Core Tite       Core Principles of Mathematics.       C       Math 1351 with a grade of C' or better.       Attraction Core for more details.         3       Ontools 1       Fundamentals of Mathematics.       C       Math 1351 with a grade of C' or better.       See General Education Core for m	17	Semester Total Hours					
a       Choose 1       American History (Core)       C       0 40         1       UTCH 1102       Inquiry-Based Lesson Design       C       0       DTCH 1101 with a grade of 'C'         4       MATH 2413       Calculus 1       C       C       MATH 2412 with a grade of 'C'         3       ECON 1301 or ECON 2001       Induction to Economics or       Principles of the standard or the standard	3	Choose 1	Communication (Core)	с	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	
Notes       Number of High Place       American Heatry (Code)       C       Code       Options: HIST 1302 or HIST MASC 2328         V       V       UTCH 1102       Inquiry-Based Lesson Design       C       Z       WTCH 1102       Inquiry-Based Lesson Design       C       Z       WTCH 1102       Induction In Economics or Princips of	3	MATH 1351	Fundamentals of Mathematics II	С		MATH 1350 with a grade of 'C' or better.	
Image: Processing the Procese the Procese the Procese the Procese the Processing the Processing	9 <mark>9</mark> 3	Choose 1	American History (Core)	С	060		
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3       ECON 1301 ECON 2301       Macroeenomics       000         1       Semester Total Hours       Addroid Nees         4       Oruse 31%       Orus	4	MATH 2413	Calculus I	С			
Image: Problem         Course #	-				080		
V 4       PHYS 2425       Physics for Scientists and Engineers I       G       G       MATH 2413 and concurrent enrollment in MATH 2414.       Percent of the second of t				Min	_		
Notestime	! H	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
Note       Note       Note       Note       Note       Note         1       POLS 2305       Government/Political Science (Core)       10       070       See General Education Core for more details         3       Choose 1       Creative Arts (Core)       10       050       See General Education Core for course options.         3       Choose 1       Language, Philosophy & Culture (Core)       040       See General Education Core for course options.         Matrix       See General Education Core for course options.       See General Education Core for course options.         4       PHYS 2426       Physics for Scientists and Engineers II       040       See General Education Core for course options.         3       MATE 3302       Fundamentals of Measurement and Geometry I       C       MatTH 1351 with a grade of 'C' or better.       See General Education Core for more details         3       POLS 2306       Government/Political Science (Core)       G       070       See General Education Core for more details         3       UTCH 3301       Knowing and Learning in Mathematics and Science       C       Not       Not       See General Education Core for course options.         4       Choose 1       Integrative/Experiential Learning Option (Core)       G       070       See General Education Core for course options.	• 4	PHYS 2425	Physics for Scientists and Engineers I		030	MATH 2413 and concurrent enrollment in MATH 2414.	
Note:       Note: <th< td=""><td>• 3</td><td>MATE 3301</td><td>Fundamentals of Middle School Mathematics</td><td>С</td><td></td><td>MATH 1351 with a grade of 'C' or better.</td><td></td></th<>	• 3	MATE 3301	Fundamentals of Middle School Mathematics	С		MATH 1351 with a grade of 'C' or better.	
Note	EALL	POLS 2305	Government/Political Science (Core)		070		See General Education Core for more details
No       No <th< td=""><td>3</td><td>Choose 1</td><td>Creative Arts (Core)</td><td></td><td>050</td><td></td><td>See General Education Core for course options.</td></th<>	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
V       V			Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
Matrix	16	Semester Total Hours		1 1			
Matrix	4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425.	
V       V	• 3	MATE 3302	Fundamentals of Measurement and Geometry I	С		MATH 1351 with a grade of 'C' or better.	
o     3     01CH 301     Knowing and Learning in Mathematics and Science     C     UTCH 1102 with consent of Uteach Advisor.       1     Choose 1     Integrative/Experiential Learning Option (Core)     090     See General Education Core for course options.       1     Choose 1     Integrative/Experiential Learning Option (Core)     090     See General Education Core for course options.	9 <sup>3</sup>	POLS 2306	Government/Political Science (Core)		070		See General Education Core for more details
Image: Construction of the co	SPRI	UTCH 3301	Knowing and Learning in Mathematics and Science	С			
	1	Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
						Must apply to Teacher Education	Program
14 Semester Total Hours	14	Semester Total Hours					

CORE: The 2020-2021 list of core courses can be found in the 2020-2021 Undergraduate Catalog: www.utrgv.edu > See 'Core Curriculum'

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 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary; 090 - Technologies; 090 - Language Diversity & Writing.

	: Н	Course #	Course Title	Min. Grade	EC Prerequisite	Additional Notes
	3	MATE 3303	Fundamentals of Measurement and Geometry II	с	MATE 3302 with a grade of 'C' or better.	
	3	MATE 3304	Fundamentals of Algebraic Structures	С	MATH 1351 with a grade of 'C' or better.	
FALL	3	MATE 3321/BOIL/PHYS 3330	Functions and Modeling	с	MATH 2413 and UTCH 1102, each with a grade of 'C' or better.	
	4	X4XX X4XX	Life and Physical Sciences			Support Course
YEAR	3	UTCH 3302	Classroom Interactions		(a) A University grade point average of at least 2.75, (b) UTCH 3301 with a grade of "C" and admission to Teacher Education Program.	
IRD	16	Semester Total Hours				
Ė	3	MATE 3305	Fundamentals of Statistics and Probability	С	MATH 1351 or MATH 2413 with a grade of 'C' or better.	
	3	MATE 3306	Middle School Mathematics in a Technological Environment	С	MATH 1351 with a grade of 'C' or better.	
SPRING	3	MATE 3307	Fundamentals of Problem Solving	С	MATH 1351 with a grade of 'C' or better.	
s	3	MATE 3313	Fundamentals of Mathematics History	С	MATH 1351 and MATH 2412, each with a grade of 'C' or better.	
	3	MATE 4392	Research Methods in Middle & Secondary School Math	С	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301	
	15	Semester Total Hours				
	• н	Course #	Course Title	Min. GE Grade	EC Prerequisite	Additional Notes
	• н З	Course # MATE 3317	Course Title Perspectives in Mathematics and Science	Min. GE Grade GE	EC Prerequisite MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	Additional Notes
						Additional Notes
FALL	3	MATE 3317	Perspectives in Mathematics and Science	С	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	Additional Notes
FALL	3	MATE 3317 MATE 3311	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics	C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better.	Additional Notes
H YEAR FALL	3 3 3	MATE 3317 MATE 3311 MATE 3312	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics Fundamentals of Number Theory	C C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better.	Additional Notes
DURTH YEAR FALL	3 3 3 3	MATE 3317 MATE 3311 MATE 3312 MATE 3314	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics Fundamentals of Number Theory Fundamentals of Mathematical Structures and Processes	C C C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better.	Additional Notes
FOURTH YEAR FALL	3 3 3 3 3 3	MATE 3317 MATE 3311 MATE 3312 MATE 3314 UTCH 3303	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics Fundamentals of Number Theory Fundamentals of Mathematical Structures and Processes	C C C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better.	Additional Notes
FOURTH YEAR SPRING FALL	3 3 3 3 3 3 15	MATE 3317 MATE 3311 MATE 3312 MATE 3314 UTCH 3303 Semester Total Hours	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics Fundamentals of Number Theory Fundamentals of Mathematical Structures and Processes Project-Based Instruction	C C C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better.	Additional Notes
FOURTH YEAR SPRING FALL	3 3 3 3 3 3 15	MATE 3317 MATE 3311 MATE 3312 MATE 3314 UTCH 3303 Semester Total Hours READ 4305	Perspectives in Mathematics and Science Fundamentals of Discrete Mathematics Fundamentals of Number Theory Fundamentals of Mathematical Structures and Processes Project-Based Instruction Disciplinary Literacy in Content Area Classrooms	C C C C	MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better. MATH 1351 with a grade of 'C' or better. (a) University grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C". (a) University grade point average of at least 2.75, (b) UTCH 3303 with a grade of "C" or better, © concurrent enrollment with UTCH 4601, (d) successful completion of PPR and	Additional Notes

Note

This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001. This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

Major Admission Requirements: Admission to the Teacher Education Program at the Office of Educator Preparation and Accountability is required for completion of teacher certification requirements with the undergraduate degree. All admission requirements are in accordance to Texas Administrative Code rules §227.10 and the HEA Title II accountability requirements. All applicants must meet the current certification requirements in effect at the time of application, regardless of the catalog year of degree plan.

Major 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 7 advanced hours, as recommended by advisor.

Major Graduation Requirements: Major requirements must be completed with a minimum grade of "C" and GPA of 2.75.

120 TOTAL HOURS

(42) Advanced institutional minimum credit hours

Approved: Thursday, February 4, 2021

Revised: Tuesday, November 17, 2020