

FOUR YEAR PLAN | Mathematics with an Education Minor

VISTA:: Mathematics :: Department of Physical Sciences and Applied Mathematics
 This is a sample 4-year plan for **ODD** years. Students are required to meet with their Academic Advisors each semester.



VANGUARD UNIVERSITY

YEAR ONE

FALL SEMESTER		
COURSE #	COURSE NAME	UNITS
CORE 100C	Cornerstone	1
MATH 180C	Calculus I ¹	4
POLS 155C	American Democracy ²	3
NT 101C	New Testament Survey	3
KINE 145C	Lifetime Fitness and Wellness (Lecture)	1
ENGL 120C	Persuasive Writing	3
TOTAL		15

SPRING SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 181C	Calculus II	4
KINE 146C	Lifetime Fitness and Wellness (Activity)	1
CSCI 100C/L	Introduction to Computer Science	4
MATH 285	Introduction to Advance Math	3
THEO 101C	Foundations of Christian Life	3
COMM 201C	Speech Composition	3
TOTAL		18

YEAR TWO

FALL SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 281	Multivariable Calculus	4
MATH 300	Linear Algebra	3
ENGL 220C	Researched Writing	3
MATH 410	Abstract Algebra	3
MATH 265	Introduction to Statistical Methods	3
TOTAL		16

SPRING SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 330	Number Theory ⁴	3
PSYC 103C	Introduction to Psychology	3
MATH 380	Elementary Analysis ⁴	3
MATH 207	Computer Programming	3
OT 201C	Old Testament Survey	3
TOTAL		15

YEAR THREE

FALL SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 390	Numerical Analysis	3
EDUC 315	Teaching in a Multicultural Setting	3
ENGL 230C	Literature/Human Experience	3
HIST 203C / HIST 204C	World Civilization I or World Civilization II	3
ANTH 102C	Introduction to Cultural Anthropology	3
THEO 300C	Christian World View	3
TOTAL		18

SPRING SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 310	Differential Equations	3
MATH 365	Probability and Statistics	3
MATH 485	Undergraduate Research ³	2
ANTH 453	Language, Culture and Linguistics ²	3
MATH 420	Higher Geometry ⁴	3
FINA	Fine Arts Requirement	3
CHIS 400C	Christian Heritage	3
TOTAL		18-20

YEAR FOUR

FALL SEMESTER		
COURSE #	COURSE NAME	UNITS
EDUC 424	Foundations in Teaching SS	2
EDUC 426	Instructional Design and Pedagogy	4
EDUC 435	Early Supervised Field Work	4
EDUC 444	Language Acquisition	1
EDUC 447	Metacognition and Reading	1
EDUC 452	Literacy in the Content Area	1
EDUC 464	Use of Technology in the Classroom	1
EDUC 442	Cal TPA Cycle 1 BST	0.5
TOTAL		14.5

SPRING SEMESTER		
COURSE #	COURSE NAME	UNITS
MATH 499C	Capstone	2
EDUC 434	Curriculum Unit Planning for SS	2
EDUC 488	Clinical Practice Seminar for SS	2
EDUC 489	Clinical Practice Fieldwork for SS	8
EDUC 443	Cal TPA Cycle 2 AST	0.5
TOTAL		14.5

NOTES ¹ A passing score on the placement exam is required for enrollment.
² POLS 155C and ANTH 453 are Credential program requirements.
³ CHEM/ENVR 485 is typically taught in summer. A limited number of fellowships are available. Off-campus internships (CHEM/ENVR 450) as well as Senior Project (CHEM/ENVR 488) are acceptable for degree requirements.
⁴ Course is offered on an alternating even/odd year cycle.



VISTA PROGRAM: MATH 131 units
Math Integrated Teaching Credential with an Education Minor

Core Curriculum

<input type="checkbox"/> CORE 100C	1
Core 100C: Cornerstone	
<input type="checkbox"/> ENGL 120C	3
ENGL 120C: Persuasive Writing	
<input type="checkbox"/> KINE 145C/146C	2
KINE 145C: Lifetime Fitness (Lecture) KINE 146C: Lifetime Fitness (Activity)	
<input type="checkbox"/> POLS 155C	3
¹ POLS 155C: American Democracy	
<input type="checkbox"/> COMM 201C	3
COMM 201C: Speech Composition	
<input type="checkbox"/> ENGL 220C	3
ENGL 220C: Researched Writing	
<input type="checkbox"/> ENGL 230C	3
ENGL 230C: Literature/Human Exp.	
<input type="checkbox"/> Social Science (CHOOSE 2) ...	6
ANTH 102C: Intro to Cultural Anthro PSYC 103C: General Psychology SOC 100C: Intro to Sociology	
<input type="checkbox"/> World Civilization (CHOOSE 1)	3
HIST 203C: World Civilization I HIST 204C: World Civilization II	
<input type="checkbox"/> Fine Arts (CHOOSE 1)	3
ART 252C, FINA 215C, MUJZ 355C, MUSC 202C, THEA 102C, THEA 200C, THEA 202C,	
<input type="checkbox"/> Bible/Theology	15
NT 101C: New Testament Survey..... 3 Theology (Choose 1)..... 3 THEO 101C: Found/Christian Life THEO 103C: Intro to Theology OT 201C: Old Testament Survey..... 3 THEO 300C: Christian World View.. 3 CHIS 400C: Christian Heritage..... 3	

Total Core units	30
Total Bible/Theology units.....	15
Total Core units	45

**VISTA: Math
LOWER DIVISION**

<input type="checkbox"/> CSCI 100 C/L	4
Introduction to Computer Science	
<input type="checkbox"/> MATH 180C	4
+ Calculus I	
<input type="checkbox"/> MATH 181C	4
+ Calculus II	
<input type="checkbox"/> MATH 207	3
Computer Programming	
<input type="checkbox"/> MATH 265C	3
Introduction to Statistical Methods	
<input type="checkbox"/> MATH 281	4
+ Multivariable Calculus	
<input type="checkbox"/> MATH 285	3
+ Introduction to Advanced Math	

UPPER DIVISION

<input type="checkbox"/> MATH 300	3
+ Linear Algebra	
<input type="checkbox"/> MATH 310	3
+ Differential Equations	
<input type="checkbox"/> EDUC 315	3
Teaching in Multicultural Setting	
<input type="checkbox"/> MATH 330	3
+ Number Theory	
<input type="checkbox"/> MATH 365	3
+ Probability and Statistics	
<input type="checkbox"/> MATH 380	3
+ Elementary Analysis I	
<input type="checkbox"/> MATH 390	3
+ Numerical Analysis	
<input type="checkbox"/> MATH 410	3
+ Abstract Algebra	
<input type="checkbox"/> MATH 420	3
+ Higher Geometry	
<input type="checkbox"/> ANTH 453	3
¹ Language, Culture and Linguistics	
<input type="checkbox"/> MATH 499C	2
Mathematics Capstone	
<input type="checkbox"/> Research/Project (Choose 1)	2
o MATH 450: Internship Program	
o MATH 485: Undergraduate Research	
o MATH 488: Senior Project	

Upper Division units.....	25
Lower Division units	34
Total Math units	59

**Single Subject Credential
FIRST SEMESTER:**

<input type="checkbox"/> EDUC 424	2
Foundations in Teaching Single Subject	
<input type="checkbox"/> EDUC 426	4
Instructional Design & Subject Specific Pedagogy for Single Subject	
<input type="checkbox"/> EDUC 435	4
² Early Supervised Field Work	
<input type="checkbox"/> EDUC 444	1
Language Acquisition for the Secondary Student	
<input type="checkbox"/> EDUC 447	1
Metacognition & Reading Strategies for Student Learning	

<input type="checkbox"/> EDUC 452	1
Literacy in the Content Area	
<input type="checkbox"/> EDUC 464	1
Use of Technology in the Classroom	
<input type="checkbox"/> EDUC 442	0.5
Cal TPA Cycle 1 BST	

SECOND SEMESTER:

<input type="checkbox"/> EDUC 434	2
Curriculum Unit Planning for SS	
<input type="checkbox"/> EDUC 488	2
Clinical Practice Seminar for SS	
<input type="checkbox"/> EDUC 489	8
³ Clinical Practice Fieldwork for SS	
<input type="checkbox"/> EDUC 443	0.5
Cal TPA Cycle 2 AST	

LEGEND:

- ¹Credential Program Requirement
- ²BST Semester: 2 full-time days per week (100 hours) at a school site. Lab Fee.
- ³AST Semester: 5 full-time days per week (500 hours) at a school site. Lab Fee.
- + Subject Matter Preparation Program (SMPP) Required Courses

First semester	14.5
Second semester	12.5
Total Credential units	27