

## ARTS AND SCIENCES TRANSFER DEGREE

### *Pure and Applied Mathematics (Area of Concentration) – M503*

#### *Associate of Science Degree (AS)*

**CATALOG DESCRIPTION OF PROGRAM:**

Increasingly, highly motivated students whose sights are set on careers in law, medicine, pharmacy, business, education, government service, journalism, the visual arts, music, the social sciences, languages, and other fields are finding that the most strongly recommended path to a bachelor's degree and professional school training is a liberal arts education. BCCC's Arts and Sciences Transfer Program is an excellent means to begin this path.

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
<b>1<sup>st</sup> Semester</b>					
PRE 100	Preparation for Academic Achievement	1	None		
ENG 101	English Writing	3	ENG 82 or RENG 92 or appropriate course		
HLF-Elective	Health and Life Fitness	1	Depends on course chosen		
MAT 140	Calculus I	4	MAT 129		
PHI 104	Logic and Critical Thinking	3	ENG 82 or RENG 92		
SP 101	Fundamentals of Speech Communication	3	ENG 82 or RENG 92 or appropriate course		
<b>Semester Credits</b>		<b>15</b>			
<b>2<sup>nd</sup> Semester</b>					
CSC 108	Programming in C	3	ENG 82 or RENG 92; MAT125 or MAT 128; CISS 116		
ECO 201	The American Economy I: Macroeconomic Theory	3	ENG 82 or RENG 92		
ENG 200	Introduction to Literature	3	ENG 101		
MAT 141	Calculus II	4	MAT 140		
MAT 107	Modern Elementary Statistics	3	MAT 86 or MAT 91 and RENG 92		
<b>Semester Credits</b>		<b>16</b>			
<b>3<sup>rd</sup> Semester</b>					
MAT 219	Discrete Mathematics	3	MAT 129		
H 101 or H 151	History of American Civilization I or World History I	3	ENG 82 or RENG 92		
MAT 210	Advanced Calculus	4	MAT 141		
PHY 203	General Physics I	5	MAT 140		
<b>Semester Credits</b>		<b>15</b>			
<b>4<sup>th</sup> Semester</b>					
HLF-Elective	Health and Life Fitness	1	None		
MAT 211	Differential Equations	4	MAT 141		
MAT 212	Linear Algebra	4	MAT 141		
PHY 204	General Physics II	5	MAT 141; PHY 203		
<b>Semester Credits</b>		<b>14</b>			
<b>PROGRAM TOTAL</b>		<b>60</b>			

Advisor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Pre-Requisites for Students in Developmental Courses

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
<b>RENG 90</b>	Intensive Program Writing	4 hrs.	Placement Test		
<b>RENG 91</b>	Composition Skills I	4 hrs.	Placement Test or RENG 90		
<b>RENG 92</b>	Composition Skills II	4 hrs.	Placement Test or RENG 91		
<b>MAT 80</b>	Arithmetic	3 hrs.	Placement Test		
<b>MAT 86/</b>	Integrated Pre-Algebra and Introductory Algebra	5 hrs.	Placement Test or MAT 80		
<b>MAT 87M</b>	Integrated Elementary and Intermediate Algebra		Students who complete MAT 80 with an A or B within a one year period; Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.		
<b>MAT 91</b>	Elementary Algebra	4 hrs.	Placement Test or MAT 80		
<b>MAT 92</b>	Intermediate Algebra	4 hrs.	Placement Test or MAT 91		