

**DAYSTAR PROGRAM CHECKLIST
SECONDARY
MATH CERTIFICATION (Grades 9-12)**



Education department

GENERAL EDUCATION

38 – 47 hrs

The general education component is to be completed according to Columbia College degree requirements. (Please refer to your entrance year catalog for specific degree requirements.)

LIBERAL ARTS AND SCIENCE DEGREE

40 – 63 hrs

Secondary Education majors may choose from the following recommended degree areas.

- BA – American Studies
- BA – Art
- BS – Art
- BA – Biology
- BS – Biology
- BA – Business Administration
- BS – Business Administration
- BA – Chemistry
- BA – English
- BS – Environmental Science
- BA – History
- BS – Mathematics
- BA - Sociology

Students must complete the degree requirements as set forth by Columbia College. Hours required for completion will vary depending on area chosen. (Please refer to your entrance year catalog for specific degree requirements.)

CONTENT AREA COURSEWORK FOR MATH

30 hrs minimum

Grade	Course #	Course Title	Cr Hrs
-------	----------	--------------	--------

Calculus and Geometry (8 hrs)

	MATH 201	Calculus and Analytical Geometry I	5
	MATH 222	Calculus and Analytical Geometry II	5

	MATH 150	College Algebra (<i>Algebraic Structures 3 hrs</i>)	3
	MATH 331	Foundations of Geometry (<i>Geometry 3 hrs</i>)	3
	Choose:	CISS 176 - Introduction to Computer Science or CISS 145 - Introduction to Python Programming (<i>Computer Science 2 hrs</i>)	3
	Electives:	Math Electives (1-4) hours from the above listed categories to reach 20-hr minimum.	1-4

Minimum ten (10) hrs from at least three of the following areas:

	MATH 330	History of Mathematics (<i>History of Mathematics</i>)	3
	MATH 102	Math for the Elementary School Teacher (<i>Structure of the Real/Number System</i>)	3
	MATH 305	Number Theory (<i>Number Theory 2-3 hrs</i>)	3
	MATH 300	Multivariate Calculus (<i>Completion of Calculus Sequence 2-5 hrs</i>)	3
	Choose:	MATH 250 - Statistics I or MATH 338 - Mathematical Statistics and Probability (<i>Probability and Statistics 2-3 hrs</i>)	3
	CISS 240	Introduction to Programming (<i>Computer Science 2-5 hrs</i>)	3

[The College reserves the right to alter at any time requirements to meet state certification regulations.]

	EDUC 514	Mathematics for the Special Needs Child (remedial) is available at the graduate level for MAT Post-Baccalaureate students. (<i>Math for Exceptional Children 2-3 hrs</i>)	3
	MATH 303	Linear Algebra (<i>Linear Algebra</i>)	3

PROFESSIONAL EDUCATION COURSEWORK

63 hrs

Grade	Course #	Course Title	Cr Hrs	Field Experience (observation hrs) included
	SOCI 270	Minority Cultures and Relations	3	none
	EDUC 100	Introduction to Education (formerly EDUC 102/103)	3	15 hrs
	EDUC 198	Field Experience I*	1	15 hrs
	EDUC 200	Law, Ethics, and Education	3	none
	EDUC 230	Educational Psychology	3	none
	EDUC 298	Field Experience II*	1	15 hrs
	EDUC 300	Techniques of Teaching	3	15 hrs

Admission to the Teacher Certification Program (See Teacher Certification Program checklist)

	EDUC 338	Teaching Reading in the Content Areas & Secondary Schools	3	15 hrs
	EDUC 360	Teaching Mathematics in Middle and Secondary Schools	3	15 hrs
	EDUC 398	DAYASTAR Field Experience III	1	35 hrs
	EDUC 525	Educating Exceptional Individuals	3	none
	EDUC 550	Human Development	3	none
	EDUC 563	Management of the Classroom Environment	3	15 hrs
	EDUC 580	Methods of Effective Academic Evaluation	3	none
	EDUC 400	Senior Seminar	3	none

Approval for Student Teaching (See Student Teaching Checklist)

	EDUC 698	Graduate Student Teaching	9	16 weeks
		Total Credit Hours (undergraduate)	27	

Approval for DESE certification recommendation (See DESE Certification Checklist)

Continue with Remaining MAT Degree coursework; Submit Declaration of Candidacy for Degree before last semester

	EDUC 500	Research Design	3	none
	EDUC 504	Curriculum Design and Evaluation	3	none
	EDUC 508	Integrative Project	3	none
	Elective:	From "Curriculum & Instruction" section of MAT checklist	3	none
	EDUC 582	Evaluation of Teaching Effectiveness	3	none
		Total hours toward MAT:	36	

NOTE: To take any course listed with a field experience component, student must submit application forms by the deadline (semester BEFORE desired enrollment). See Education Office for deadline information.

[The College reserves the right to alter at any time requirements to meet state certification regulations.

125 – 140 hrs Total

36 hrs

OTHER REQUIREMENTS

- ### Retention Criteria:

- *This is not an undergraduate degree checklist

Rev. 8/2015

THE DAYSTAR PROGRAM

Complete High School	<u>Hours</u>
Summer One [EDUC 100 (3 hrs); EDUC 200 (3 hrs); SOCI 270 (3 hrs)]	9 hrs
Year One [EDUC 198 (1 hr); hours toward certification and major]	30-36 hrs
Summer Two [EDUC 230 (3 hrs); EDUC 300 (3 hrs)]	6 hrs
Year Two [EDUC 298 (1 hr); hours toward certification and major]	30-36 hrs
Summer Three [EDUC 338 (3 hrs); hours toward certification or major]	6 hrs
Year Three [EDUC 360 (3 hrs); EDUC 398 (1 hr); hours toward certification or major]	30-36 hrs
Bachelor's Degree Awarded (Approx. 138 hrs)	

Must be admitted to the MAT-Post Baccalaureate Program to be eligible for Summer Four course enrollment.

Summer Four

[EDUC 500 (3 hrs); EDUC 525 (3 hrs); EDUC 563 (3 hrs)]	9 hrs
--	-------

Year Four

[1 st 8 wk Session EDUC "C & I" elective (3 hrs); EDUC 400 (3 hrs)]	
[2 nd 8 wk Session EDUC 550 (3 hrs); EDUC 580 (3 hrs)]	
[3 rd 8 wk Sessions EDUC 698 (9 hrs) (this is a 16-week course)]	
[4 th 8 wk Session – continuation of student teaching]	18 hrs (graduate hours)

Eligible for DESE Certification after the 3rd 8 wk session

Summer Five

[EDUC 504 (3 hrs); EDUC 508 (3 hrs); EDUC 582 (3 hrs)] 9 hrs

MAT Awarded (36 hrs)

Daystar Program Completed

[The College reserves the right to alter at any time requirements to meet state certification regulations.