

$$\Rightarrow g'(y) = 2y$$

MATHEMATICS

(associate of science)

The mission of the Mathematics department is to support students in learning those numerical skills and analytical abilities that will enable them to solve problems they will encounter both in their career responsibilities and their future academic pursuits.

$$\Rightarrow (2y - x) dy = (-x + g'(y)) dy$$
$$2y \Rightarrow g'(y) = 2y \Rightarrow g(y) = y^2$$

$$\therefore \Psi(x, y) = x^2 - xy + y^2$$

web: otc.edu/math
mail: math@otc.edu
phone: 417.447.8217

ASSOCIATE OF SCIENCE (A.S.) MATHEMATICS

Semester 1	Course Title	credit hours
MTH 140	Analytical Geometry and Calculus I	5
ENG 102	Composition I	3
CIS 120	Introduction to Computer Programming	3
One of the Following: PLS 101 HST 120 HST 130	American Government and Politics U.S. History I: to 1865 U.S. History II: 1865-Present	3
Total Hours		14

Semester 2	Course Title	credit hours
MTH 141	Analytic Geometry and Calculus II	5
ENG 150	Technical Writing	3
PHY 220	Physics Engrs & Scientists I	5
ART, HUM, MUS, PHL, THR, or REL	Humanities and Fine Arts Elective	3
Total Hours		16

Semester 3	Course Title	credit hours
MTH 240	Analytic Geometry and Calculus III	3
MTH 215	Algebraic Structures	3
COM 105	Public Speaking	3
ECO 270	Principles of Macroeconomics	3
GENERAL ELECTIVE	General Elective	3-5
Total Hours		15-17

Semester 4	Course Title	credit hours
Two of the Following: MTH 210 MTH 230 MTH 241	Statistical Methods Linear Algebra Differential Equations	6
BIO 160	General Biology I	4
GENERAL ELECTIVE	General Elective	3
GENERAL ELECTIVE	General Elective	3
Total Hours		16
Total AA Degree (Art Pathway Hours)		61-63