Glendale College

Course Outline of Record Report

Course ID 000107

Revision - March 2025

ABSE25 : GEOMETRY 1A

General Information

Author:	• Jesus Carino • Perner, Kimberli
Course Code (CB01) :	ABSE25
Course Title (CB02) :	GEOMETRY 1A
Department:	ABSE
Proposal Start:	Fall 2025
TOP Code (CB03) :	(4930.62) Secondary Education (Grades 9-12) and G.E.D.
CIP Code:	(53.0201) High School Equivalence Certificate Program.
SAM Code (CB09) :	E - Non-Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	Yes
Course Control Number (CB00) :	CCC000305244
Curriculum Committee Approval Date:	03/26/2025
Board of Trustees Approval Date:	06/17/2025
Last Cyclical Review Date:	05/08/2024
Course Description and Course Note:	ABSE 25 is the first half of a one -year high school level geometry course. In this course the notion of two-dimensional shapes as part of the Euclidian Plane and exploration of transformations of this plane as a way to determine whether two shapes are congruent are formalized. Students use transformations to prove geometric theorems. This course is designed to meet the needs of students who wish to begin their study of geometry and to earn high school credit in math. Laboratory 100 hours. Note: This is a self-paced course in an open-entry, open-exit lab environment. Successful completion of the course results in 5 high school credits.
Justification:	Content Change
Academic Career:	• Noncredit
Mode of Delivery:	• Online
Author:	No value
Course Family:	No value

Academic Senate Discipline

Primary Discipline:	• Mathematics-Basic Skills: Non-Credit
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade Only

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	0
Maximum Credit Units (CB06)	0
Total Course In-Class (Contact) Hours	100
Total Course Out-of-Class Hours	0
Total Student Learning Hours	100

Credit / Non-Credit Options

Course Type (CB04)

Non-Credit

Noncredit Course Category (CB22)

Elementary and Secondary Basic Skills.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Other Non-Credit Enhanced Funding.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0	0
Laboratory Hours	100	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	0

Laboratory	100
Studio	0
Total	100

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Studio	0
Total	0

Time Commitment Notes for Students

This is a self-paced course in an open-entry, open-exit lab environment.

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Prerequisites, Corequisites, Recommended Corequisites, and Recommended Preparation

Advisory

ABSE24 - ALGEBRA 1B

Objectives

- Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
- Create linear and quadratic equations to solve problems.
- Create equations in two or more variables to represent relationships between quantities.
- Write arithmetic and geometric sequences both recursively and with an explicit formula.
- Identify the effects on a graph by changing part of a function.
- Distinguish between situations that can be modeled with linear functions and with exponential functions.
- Construct linear and exponential functions including arithmetic and geometric sequences from various sources.
- Compare linear, quadratic, and exponential growth.
- Interpret the parameters in a linear or exponential function in terms of a context.
- Display and analyze data statistically.
- Solve simple problems involving theoretical and experimental probability.

AND

Advisory

ESL30 - ENGLISH AS A SECOND LANGUAGE LEVEL 3

Objectives

- Develop coherence and mechanical accuracy.
- Demonstrate mastery of grammatical structures studied at a level sufficient to pass unit tests and the divisional grammar mastery test for this level.
- Converse at a functional level adequate for everyday use on the campus and in the community.

Entry Standards

Entry Standards	Description
No value	No value

Course Limitations

Cross Listed or Equivalent Course	Description
N/A	No Value

Requisite Validation

Upload Statistical Validation and/or other documents (if necessary)

No Value

Specifications

Methods of Instruction

Methods of Instruction	
Methods of Instruction	Independent Study
Methods of Instruction	Multimedia
Methods of Instruction	Collaborative Learning

Out of Class Assignments

N/A

Methods of Evaluation	Description of Activity/Interaction
Other	Completion of individualized contract

Exam/Quiz/Test	Assessments at the end of each chapter
Exam/Quiz/Test	Unit exams

Textbook Rationale

No updated version of textbook. OER material added.

Textbooks

Author	Title	Publisher	Date	ISBN
Ron Larson and Laurie Boswell	Big Ideas Math Geometry	Big Ideas Learning	2014	978-160840-8399

Other Instructional Materials (i.e. OER, handouts)

Description	Instructor-generated materials covering the mathematics being studied, along with handouts duplicated from books obtained with copyright permission.
Author	No value
Citation	No value
Online Resource(s)	No value

Learning Outcomes

Course Objectives

Make a variety of formal geometric constructions using a variety of tools.

Experiment with transformations in the plane.

Understand congruence in terms of rigid motions.

Explain triangle congruence in terms of rigid motion.

Prove theorems about lines and angles, triangles, and parallelograms.

SLOs

Create formal geometric constructions with a variety of tools and methods. This can be through the use of measurement tools, the use of software, or any other form of visual representation.

Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.
ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.

Apply rigid motion to map corresponding parts of congruent triangles to each other and use triangle congruence criteria (ASA, SAS, and SSS) to demonstrate triangle congruence.
Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.
ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.

Produce proofs of theorems through the appropriate use of mathematical language, with a valid sequence of steps and definitions.
Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.
ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.

Verify experimentally that in a triangle, the angles opposite longer sides are larger, sides opposite larger angles are longer, and the sum of the lengths of any two sides is greater than the length of the remaining side.
Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.
ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.

Additional SLO Information

Does this proposal include revisions that might improve student attainment of course learning outcomes?

No

Is this proposal submitted in response to learning outcomes assessment data?

No

If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.

No Value

SLO Evidence

No Value

Course Content

Lecture Content

No value

Laboratory/Studio Content

Foundations for Geometry (16 hours)

- Points, lines, and planes
- Segment and angle measurement
- Pairs of angles
- Formulas in geometry
- Midpoint and distance formulas
- Transformations

Transformational Geometry (17 hours)

- Reflections Translations and rotations
- Compositions of transformations
- Symmetry
- Dilations

Geometric Reasoning (14 hours)

- Inductive reasoning
- Conditionals and deductive reasoning
- Biconditionals and definitions
- Algebraic proof
- Geometric proof

Parallel and Perpendicular Lines (18 hours)

- Parallel lines
- Transversals
- Parallel line theorems
- Constructions and problem solving
- Quadrilaterals and parallels
- Proving lines parallel

Triangle Congruence (18 hours)

- Properties and angle relationships in triangles
- Congruent triangles

- Triangle congruence: side-side-side (SSS), side-angle-side (SAS), angle-side-angle (ASA), hypotenuse-leg (HL), corresponding parts of congruent triangles are congruent (CPCTC)
- Introduction to coordinate proof
- Isosceles and equilateral triangles

Properties and Attributes of Triangles (17 hours)

- Perpendicular and angle bisectors
- Bisectors, medians, and altitudes of triangles
- The triangle midsegment theorem
- Inequalities in one and two triangle

Total hours: 100

Additional Information

Repeatability

Repeatable

Justification (if repeatable was chosen above)

Non-credit courses

Is it possible this course will have a material fee?

No

I have contacted my library liaison (https://campusguides.glendale.edu/faculty/liaisons):

Yes

What term(s) will this course be offered?

Fall/Winter/Spring/Summer

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value