Glendale College

Course Outline of Record Report

Course ID 000108

Revision - March 2025

ABSE26 : GEOMETRY 1B

General Information

Author:	• Jesus Carino • Perner, Kimberli
Course Code (CB01) :	ABSE26
Course Title (CB02) :	GEOMETRY 1B
Department:	ABSE
Proposal Start:	Spring 2026
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) :	CCC000340633
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 26 is the second half of a one-year high school level geometry course. In this course, students explore similarity and trigonometric ratios in right triangles, investigate and prove geometric theorems, and extend their knowledge of area and volume formulas for three-dimensional shapes. This course is designed to meet the needs of students who wish to continue their study of geometry and to earn high school credit in mathematics. 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.

Funding Agency Category (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

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

ABSE25 - GEOMETRY 1A

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.

AND

Advisory

ESL30 - ENGLISH AS A SECOND LANGUAGE LEVEL 3 (in-development)

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
No value	No value

Requisite Validation

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

No Value

Specifications

Methods of Instruction

Methods of Instruction	Independent Study
Methods of Instruction	Multimedia
Methods of Instruction	Lecture

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 editions of Common Core textbooks are available.

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

Explain similarity in terms of similarity transformations.

Prove theorems involving similarity.

Define trigonometric ratios and solve Problems involving right triangles.

Explain and use formulas for determining the volume and surface area of solids.

Visualize relationships between two-dimensional and three-dimensional objects.

Use coordinates to prove simple geometric theorems algebraically.

Apply theorems about circles.

SLOs

Analyze relationships among inscribed angles, radii, and chords; construct and apply properties of inscribed and circumscribed circles of a triangle; and use similarity transformations to define and prove triangle similarity. Expected Outcome Performance: 0.0

Apply trigonometric ratios, including those derived from special right triangles, and the Pythagorean Theorem to solve right triangle problems in applied contexts. Expected Outcome Performance: 0.0

Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g. using the distance formula. Expected Outcome Performance: 0.0

Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. Expected Outcome Performance: 0.0

Apply volume formulas for cylinders, pyramids, cones, and spheres to solve problems, and analyze the effects of scale factors on length, area, and volume. Expected Outcome Performance: 0.0

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

Similarity (16 hours)

- Ratio and proportion
- Ratios in similar polygons and triangle similarity
- Properties of similar triangles and proportional relationships
- Similarity in the coordinate plane

Right Triangles and Trigonometry (20 hours)

- Similarity in right triangles
- Pythagorean theorem and special right triangles
- Trigonometric ratios and angle measures
- Solving right triangles
- Angles of elevation and depression
- Law of sines and law of cosines

Extending Perimeter, Circumference, and Area (20 hours)

- Developing area and perimeter formulas

- Composite figures
- Perimeter and area in the coordinate plane
- Effects of changing dimensions proportionally
- Geometric probability

Spatial Reasoning (24 hours)
- Solid geometry
- Representations of three-dimensional figures
- Formulas in three dimensions
- Surface area
- Volume

Circles (20 hours)
- Lines that intersect circles
- Arcs, chords, and sectors
- Inscribed angles
- Angle and segment relationships in circles
- Circles in the coordinate plane

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