Glendale College

Course Outline of Record Report

Course ID 000106

Revision - March 2025

ABSE24 : ALGEBRA 1B

General Information

Author:	• Jesus Carino • Perner, Kimberli
Course Code (CB01) :	ABSE24
Course Title (CB02) :	ALGEBRA 1B
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) :	CCC000281522
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 24 provides students with continued instruction on reasoning and modeling algebraically. Areas presented in this class include descriptive statistics, and quadratic functions/modeling. This course is designed to meet the needs of students who wish to continue their study of algebra and 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	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

ABSE23 - ALGEBRA 1A

Objectives

- Interpret parts of an expression in terms of its context.
- Explain the steps to solve a one-variable equation and construct a viable argument to justify a solution method.
- Solve equations and inequalities in one-variable including using coefficients represented by letters.
- Solve absolute value equations and inequalities and graph their solutions.
- Choose and interpret units consistently in formulas.
- Choose and interpret the scale and the origin in graphs.
- Define appropriate quantities for the purpose of descriptive modeling.
- Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
- Create linear equations to solve problems.
- Represent constraints by equations or inequalities and by systems of equations or inequalities.
- Solve for a specific variable in a formula.
- Write functions that describe a relationship between two 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.

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
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

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 newer updated textbook available.

Textbooks

Author	Title	Publisher	Date	ISBN
Burger, Edward B., et al.	Algebra 1 Common Core Edition	Austin: Holt McDouga	2011	0547647034
Ron Larson and Laurie Boswell	Big Ideas Math Algebra 1	Big Ideas Learning	2015	978-160840-838-2

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

Description	Instructor-generated background information on the mathematics being studied; duplicated handouts from resources with copyright permission.
Author	No value
Citation	No value
Online Resource(s)	No value

Learning Outcomes

Course Objectives

Define appropriate quantities for the purpose of descriptive modeling.

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.

SLOs

Perform operations to add, subtract, and multiply polynomials, including special cases.	Expected Outcome Performance: 0.0
Solve quadratic equations using graphing, factoring, the square root property, and completing the square.	Expected Outcome Performance: 0.0
Use linear, quadratic, and exponential models to represent and solve real-world problems with equations.	Expected Outcome Performance: 0.0
Analyze data statistically and calculate experimental and theoretical probabilities of events.	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

Exponents and Polynomials (4 hours)
- Exponents
    - Integer exponents
    - Rational exponents

Polynomials (6 hours)
- Polynomials
- Addition and subtraction of polynomials
- Multiplication of polynomials
- Special products of binomials

Factoring Polynomials (8 hours)
- Factoring methods
    - Factors and greatest common factors
    - Factoring by greatest common factors
    - Factoring x2 + bx + c
    - Factoring ax2 + bx + c

Applying factoring methods (7 hours)
- Factoring special products
- Selection of factoring methods

Quadratic Functions and Equations (15 hours)
- Quadratic functions
    - Identification of quadratic functions
    - Characteristics of quadratic functions
    - Graphing quadratic functions
    - Transformation of quadratic functions

Solving quadratic equations (20 hours)
- Quadratic equations by graphing
- Quadratic equations by factoring
- Quadratic equations by using square roots
- Completing the square
- The quadratic formula and the discriminant
- Nonlinear systems
- Cubic functions and equations

Exponential Functions (10 hours)
- Exponential functions
    - Geometric sequences
    - Exponential functions

Functions, models, and patterns (10 hours)
- Exponential growth and decay
- Patterns and recursion
- Linear, quadratic, and exponential models
- Linear and nonlinear rates of change
- Comparison of functions

Data Analysis and Probability (10 hours)
- Data analysis
    - Organization and display of data
    - Frequency and histograms
    - Data distribution
    - Dot plots and distributions
    - Errors in graphs and statistics

Probability (10 hours)
- Experimental probability
- Theoretical probability
- Independent and dependent events

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