

# Glendale College Course Outline of Record Report

Course ID 000109  
Revision - March 2025

## ABSE27 : APPLIED MATHEMATICS

### General Information

<b>Author:</b>	<ul style="list-style-type: none"> <li>Jesus Carino</li> <li>Perner, Kimberli</li> </ul>
<b>Course Code (CB01) :</b>	ABSE27
<b>Course Title (CB02) :</b>	APPLIED MATHEMATICS
<b>Department:</b>	ABSE
<b>Proposal Start:</b>	Spring 2026
<b>TOP Code (CB03) :</b>	(4930.62) Secondary Education (Grades 9-12) and G.E.D.
<b>CIP Code:</b>	(53.0201) High School Equivalence Certificate Program.
<b>SAM Code (CB09) :</b>	E - Non-Occupational
<b>Distance Education Approved:</b>	No
<b>Will this course be taught asynchronously?:</b>	Yes
<b>Course Control Number (CB00) :</b>	CCC000313896
<b>Curriculum Committee Approval Date:</b>	03/26/2025
<b>Board of Trustees Approval Date:</b>	06/17/2025
<b>Last Cyclical Review Date:</b>	05/08/2024
<b>Course Description and Course Note:</b>	ABSE 27 is designed to help students use mathematical principles and computations in everyday living and business transactions. This course may be taken as a high school elective in mathematics and earn high school credit. 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.
<b>Justification:</b>	Mandatory Revision
<b>Academic Career:</b>	<ul style="list-style-type: none"> <li>Noncredit</li> </ul>
<b>Mode of Delivery:</b>	<ul style="list-style-type: none"> <li>Online</li> </ul>
<b>Author:</b>	No value
<b>Course Family:</b>	No value

### Academic Senate Discipline

<b>Primary Discipline:</b>	<ul style="list-style-type: none"> <li>Mathematics-Basic Skills: Non-Credit</li> </ul>
<b>Alternate Discipline:</b>	No value
<b>Alternate Discipline:</b>	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

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

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

Laboratory	100
Studio	0
<b>Total</b>	100
<b>Course Out-of-Class Hours</b>	
Lecture	0
Laboratory	0
Studio	0
<b>Total</b>	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**

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

<b>Course Limitations</b>	
Cross Listed or Equivalent Course	Description
No value	No value

<b>Requisite Validation</b>
<b>Upload Statistical Validation and/or other documents (if necessary)</b>
No Value

<b>Specifications</b>				
<b>Methods of Instruction</b>				
Methods of Instruction	Independent Study			
Methods of Instruction	Multimedia			
Methods of Instruction	Other			
<b>Out of Class Assignments</b>				
N/A				
<b>Methods of Evaluation</b>	<b>Description of Activity/Interaction</b>			
Other	Completion of individualized contract			
Exam/Quiz/Test	Unit exams			
<b>Textbook Rationale</b>				
Updated textbook and instructor materials added.				
<b>Textbooks</b>				
<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Date</b>	<b>ISBN</b>

Brechner, Robert, Bergman, George.	Contemporary Mathematics for Business and Consumers.	Stamford CT: Cengage Learning	2012	128544860X
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Robert Brechner, Geroge Bergeman	Contemporary Mathematics for Business & Consumers	Cengage Learning	2019	9780357026441
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**Other Instructional Materials (i.e. OER, handouts)**

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

**Learning Outcomes**

**Course Objectives**

Perform basic operations using whole numbers, decimals, fractions and percents.

Perform basic operations on a calculator.

Estimate answers.

Compute weekly and annual wages.

Calculate the cost of purchases.

Calculate consumer expenses.

Read and interpret W-2 forms.

Construct and analyze a household budget.

Determine yields of investments.

Compute problems with open-ended and closed-ended credit.

Translate words into algebraic expressions.

**SLOs**

**Compile and retrieve data from weekly and annual wages in conjunction with household budgets to make wiser financial decisions.**

Expected Outcome Performance: 70.0

*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.

*ILOs*  
Core ILOs 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.

**Interpret W-2 forms and understand how to fill out state and federal forms when reporting income.**

Expected Outcome Performance: 70.0

*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.

*ILOs*  
Core ILOs 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.

**Analyze problems with close-ended and open-ended credit by calculating basic operations involving whole numbers, decimals, and fractions.**

Expected Outcome Performance: 70.0

*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.

*ILOs*  
Core ILOs 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.

**Evaluate and interpret investment performance (e.g, yield of investments) by using multiple formalities such as the use of technology, formulas, and other traditional ways.**

Expected Outcome Performance: 70.0

*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.

*ILOs*  
Core ILOs 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.

## 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**

**Basic Operations (20 hours)**

- Whole numbers, decimals, fractions, and percent's
- Fractions, decimal, and percent conversions

**Checking Accounts (10 hours)**

- Checking accounts usage
- Bank statement reconciliation
- Solve Business Problems

**Using Equations (10 hours)**

- Basic equations
- Using equations to solve business related word problems

**Percent and Their Applications in Business (10 hours)**

- Percentage formulas in business problems
- Other business problems involving percent

**Payroll (10 hours)**

- Gross earnings and incentive pay plans
- Payroll deductions
- Payroll expenses and self-employed person's tax responsibility

**Simple Interest and Promissory Notes (10 hours)**

- Simple interest formula
- Computing simple interest
- Promissory notes and discounting

**Compound Interest and Present Value (10 hours)**

- Compound interest
- Present value

**Consumer and Business Credit (10 hours)**

- Open-end credit: charge accounts, credit cards and lines of credit
- Closed-end credit: installment loans

**Mortgages (10 hours)**

- Fixed-rate and adjustable rate mortgages
- Second mortgages, home equity loans and lines of credit

**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/liasons>):**

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