

ABSE21 : ARITHMETIC 1A

General Information

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Course Code (CB01) :	ABSE21
Course Title (CB02) :	ARITHMETIC 1A
Department:	ABSE
Proposal Start:	Winter 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) :	Non-Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000335702
Curriculum Committee Approval Date:	05/08/2024
Board of Trustees Approval Date:	06/18/2024
Last Cyclical Review Date:	05/08/2024
Course Description and Course Note:	ABSE 21 introduces students to whole number, fraction, decimal, and percent computation. This course is designed to meet the needs of students who wish to improve their basic math skills and to 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 this course is worth 5 credits (.5 unit) towards a high school diploma.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none"> Noncredit

Academic Senate Discipline

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

Course Development

Basic Skill Status (CB08)	Course Special Class Status (CB13)	Grading Basis
Course is a basic skills course.	Course is not a special class.	<ul style="list-style-type: none"> Grade Only
<input type="checkbox"/> Allow Students to Gain Credit by Exam/Challenge	Pre-Collegiate Level (CB21) Not applicable.	Course Support Course Status (CB26) Course is not a support course

Transferability & Gen. Ed. Options

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
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No Value	No Value	No Value	No Value
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Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ESL40 - ENGLISH AS A SECOND LANGUAGE LEVEL 4

Objectives

- Demonstrate mastery of grammatical structures studied at a level sufficient to pass unit tests and the divisional grammar mastery test for this level.
- Decode 3,000-word reading passages, identify main ideas and supporting details, make inferences, and summarize short passages.

Entry Standards

Entry Standards

Course Limitations

Cross Listed or Equivalent Course

Specifications

Methods of Instruction

Methods of Instruction	Independent Study
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Methods of Instruction	Multimedia
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Methods of Instruction	Discussion
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Out of Class Assignments

N/A

Methods of Evaluation

Other

Exam/Quiz/Test

Rationale

Completion of individualized contract

Unit tests

Textbook Rationale

No updated editions of Common Core textbooks are available.

Textbooks

Author

Title

Publisher

Date

ISBN

McKeague, Charles.

Basic College Mathematics.

San Louis Obispo:
XYZ Textbooks,

2015

978-1630980078

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

Description

Instructor-generated background information on the mathematics being studied; duplicated handouts from books with copyright permission.

Author

No value

Citation

No value

Online Resource(s)

No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Identify properties of addition and multiplication.

Perform the indicated operations and reduce answers to lowest terms.

Simplify expressions.

Find the perimeter and area of the figures.

Convert decimals to percent.

Write each percent as a fraction or a mixed number in lowest terms.

SLOs

Perform operations with all real numbers as needed for success in the real world and upper level mathematics.

Expected Outcome Performance: 70.0

<i>ABSE</i> NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
<i>ABSE</i> NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
<i>ILOs</i> 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.

Demonstrate conceptual understanding of the equivalency, comparison and conversion of fractions, decimals and percent.

Expected Outcome Performance: 70.0

<i>ABSE</i> NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
<i>ABSE</i> NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
<i>ILOs</i> 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.

Determine ratios and proportions and use them to solve real world problems.

Expected Outcome Performance: 70.0

<i>ABSE</i> NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
<i>ABSE</i> NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
<i>ILOs</i> 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

Whole Numbers (20 hours)

- Place value and names for numbers
 - large numbers
 - expanded form
 - writing numbers in words
 - sets and the number line
- Addition with whole numbers and perimeter
 - facts of addition
 - variables
 - vocabulary
 - properties of addition
 - solving equations
- Rounding numbers and estimating answers
 - rounding
 - estimating
- Subtraction with whole numbers
 - vocabulary
 - the meaning of subtraction
 - subtraction with borrowing
- Multiplication with whole numbers and area
 - notation
 - vocabulary
 - multiplication with whole numbers
 - solving equations
- Division with whole numbers
 - notation
 - vocabulary
 - the meaning of division
 - division by two-digit numbers
 - division by zero
- Exponents and order of operations
 - order of operations
 - meaning of exponents

Fractions and Mixed Numbers (20 hours)

- The meaning and properties of fractions
 - fractions on the number line
 - the number "1" and fractions
- Prime numbers, factors, and reducing to lowest terms
- Multiplication and division with fractions
- Addition and subtraction with fractions
- Mixed-number notation
 - notation
 - changing improper fractions to mixed numbers
- Multiplication and division with mixed numbers
- Addition and subtraction with mixed numbers
- Combination of operations and complex fractions

Decimals (20 hours)

- Decimal notation and place value
 - decimal place value
 - rounding decimal numbers
- Addition and subtraction with decimals
- Multiplication with decimals
 - estimating
 - combined operations
- Division with decimals
- Fractions and decimals
 - converting fractions to decimals
 - problems containing both fractions and decimals
- Square roots and the Pythagorean theorem

Ratio and Proportion (20 hours)

- Ratios
- Rates and unit pricing
- Solving equations by division
- Proportions
- Applications of proportions

Percent (20 hours)

- Percents, decimals, and fractions
 - the meaning of percent
 - changing percents to decimals
 - changing decimals to percents
 - changing percents to fractions
 - changing fractions to percents
- Basic percent problems
 - solving percent problems using equations
 - solving percent problems using proportions
- General applications of percent
- Sales tax and commission
- Percent increase or decrease and discount
- Interest

Total hours: 100**Additional Information**

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Repeatable

Justification (if repeatable was chosen above)

Non-credit courses

Resources

Did you contact your departmental library liaison?

No

If yes, who is your departmental library liaison?

No Value

Did you contact the DEIA liaison?

No

Were there any DEIA changes made to this outline?

No

If yes, in what areas were these changes made:

No Value

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