COURSE OUTLINE: ABSE 121
N Non-Credit
COURSE ID
APRIL 2019

COURSE DISCIPLINE: ABSE

COURSE NUMBER : 121

COURSE TITLE (FULL) : Basic Algebra Review

COURSE TITLE (SHORT) : Basic Algebra Review

CATALOG DESCRIPTION

ABSE 121 provides students with a review of reasoning and modeling algebraically. Areas presented in this class include integers, scientific notation, linear functions and equations and graphing, quadratic equations, and slope. Emphasis is placed on algebraic vocabulary and problem solving. Note: This is a noncredit open-entry, open-exit course. Laboratory 20 hours.

Total Lecture Units:0.00

Total Laboratory Units: 0.00

Total Course Units: 0.00

Total Lecture Hours:0.00

Total Laboratory Hours: 20.00

Total Laboratory Hours To Be Arranged: 0.00

Total Faculty Contact Hours: 20.00

Total Student Contact Hours: 20.00

Recommended Preparation: ESL 30 or equivalent.

ENTRY STANDARDS

	Subject	Number	Title	Description	Include
1				Perform basic arithmetic operations (addition, subtraction, multiplication, division);	Yes
2				compute problems dealing with integers, fractions, decimals, and percent;	Yes
3				converse at a functional level adequate for everyday use on the campus and in the community;	Yes
4				decode 2,500-word reading passages and respond to inference and recall questions.	Yes

EXIT STANDARDS

1 Solve equations and inequalities in one-variable including using coefficients represented by letters;
2 identify the effects on a graph by changing part of a function;
3 solve quadratic equations by graphing, by factoring, square roots, and completing the square;
4 utilize linear and quadratic equations to solve industry related problems;
5 develop fluency in algebraic terminology.

STUDENT LEARNING OUTCOMES

1 Apply algebraic principals and techniques in specific career pathways.
2 Compute linear and quadratic equations and inequalities

COURSE CONTENT WITH INSTRUCTIONAL HOURS

	Description	Lecture	Lab	Total Hours
1	Numbers and properties • Number line and signed numbers • Absolute value • Scientific notation • Powers and roots	0	3	3
2	Operating with radicals • Adding and subtracting radicals • Multiplying and dividing radicals • Order of operations	0	3	3
3	Algebra basics • Algebraic expressions including polynomials • Simplify polynomials • Add and subtract polynomials • Multiply and divide polynomials	0	4	4
4	Linear equations • Equations and equation word problems • Linear inequalities • Graphing linear equations • Solving slope problems	0	5	5
5	Quadratic expressions and solutions • Quadratic expressions • Solving quadratic problems • Graphing quadratic expressions • Algebra word-problem solving	0	5	5
				20

OUT OF CLASS ASSIGNMENTS

1 Applied practice

METHODS OF EVALUATION

1 Class participation
2 Quizzes
3 Exit assessment

METHODS OF INSTRUCTION

☑ Lecture

- [x] Laboratory
- [ ] Studio
- [x] Discussion
- [x] Multimedia
- [x] Tutorial
- [ ] Independent Study
- [x] Collaboratory Learning
- [x] Demonstration
- [ ] Field Activities (Trips)
- [ ] Guest Speakers
- [ ] Presentations

TEXTBOOKS

Title	Type	Publisher	Edition	Medium	Author	IBSN	Date
Math Sense Book 2: Focus on Problem Solving	Supplemental	New Reader Press	1		Hoyt, Cathy Fillmore	978-1-56420-692-3	2015