Discipline: Mathematics
Originator: Shelly Dawson

RIVERSIDE COMMUNITY COLLEGE DISTRICT INTEGRATED COURSE OUTLINE OF RECORD

MATHEMATICS 65

MAT-65: Arithmetic and Pre-Algebra

College: NOR Lecture Hours: 90.000 Units: 5.00 Pass/No Pass Letter Grade

Course Description

Prerequisite: None

Course Credit Recommendation: Non-Degree Credit

A combination course covering the decimal system of numeration and the four basic mathematical operations as they apply to whole numbers, fractions, mixed numbers, and decimals without the use of any calculating device. Integers, factoring, geometric figures, and measurements are included. Emphasis is placed on applications to real world problems. An introduction to the notion of algebra and its uses. Includes equations and polynomials. 90 hours lecture. (Non-degree credit course. Letter Grade, or Pass/No Pass option.)

Short Description for Class Schedule

Study of the four basic operations applied to whole numbers, integers, fractions, mixed numbers, and decimals, to include applications to real world problems along with an introduction to the notion of algebra and its uses.

Entrance Skills:

Before entering the course, students should be able to demonstrate the following skills:

Student Learning Outcomes:

Upon successful completion of the course, students should be able to demonstrate the following skills:

- Apply the principles of arithmetic on whole numbers, fractions, mixed numbers, and decimals without the use of any calculating device.
- 2. Apply the principles of arithmetic on integers and rational numbers.
- Solve applications using whole numbers, integers, fractions, mixed numbers, ratios and proportions, and decimals.
- 4. Apply percents to real world problems.
- 5. Convert the fundamental units of measurement within and between the U.S. and metric systems.
- Apply the fundamental laws of algebra to evaluate and/or simplify basic algebraic expressions and perform the four basic operations on polynomial expressions.
- 7. Solve multi-step linear equations and derive basic linear equations from elementary applications.
- 8. Use the symbols and vocabulary of arithmetic and pre-algebra to communicate mathematical concepts.

Course Content:

- 1. Integers, Fractions, Mixed Numbers, and Decimals
- 2. The Four Basic Operations Applied to:
 - a. Integers
 - b. Fractions
 - c. Mixed numbers
 - d. Decimals
- 3. Problem Solving using:
 - a. Integers
 - b. Fractions
 - c. Mixed numbers
 - d. Decimals
- 4. Percent and Interest Rate
- 5. Fundamental Units of Measurement their Conversions within and between the U.S. and Metric Systems
- 6. Ratio and Proportion
- 7. Elements of Algebra
 - a. Rules of exponents
 - b. Adding, subtracting, multiplying polynomials
 - c. Dividing monomials and polynomials by monomials
 - d. Factoring out the Greatest Common Factor
- 8. Solving Linear Equations
- Applications
- 10. Percents, Simple interest, Area and Perimeter
- 11. Translating Expressions and Equations into Algebraic Symbols

Methods of Instruction:

Methods of instruction used to achieve student learning outcomes may include, but are not limited to, the following activities:

Class lectures, discussions, and demonstrations of the principles of arithmetic and algebra and their
applications to real world problems, the four basic operations as applied to whole numbers, integers,
fractions, mixed numbers, and decimals as well as polynomial expressions, the use of percents, ratios,
proportions and the conversion of measurements employing correctly the symbols and vocabulary of
arithmetic and pre-algebra. Derivations and solutions of linear word problems in order to model
mathematical procedures and provide a context for the mathematics to the students.

- Drills and pattern practices utilizing hand-outs and/or computer-based tools in order to assist the students in mastering the techniques involved in applying the principles of arithmetic and algebra, the four basic operations as applied to whole numbers, integers, fractions, mixed numbers, and decimals as well as polynomial expressions, using percents, converting measurements, and deriving and solving linear
- Provision and employment of a variety of learning resources such as videos, slides, audio tapes, computer-based tools, manipulatives, and worksheets in order to address multiple learning styles and to reinforce material.
- Pair and small group activities, discussions, and exercises in order to promote mathematics discovery and enhance problem solving skills.

Methods of Evaluation:

Students will be evaluated for progress in and/or mastery of student learning outcomes using methods of evaluation which may include, but are not limited to, the following activities:

- Evaluation of written homework assignments and/or computerized homework assignments for correct application of the principles of arithmetic and the fundamental algebraic laws as well as the correct and appropriate usage of mathematical vocabulary and symbols.
- Evaluation of quizzes and midterm/final examinations for conceptual understanding as well as correct technique and application of the principles of arithmetic and the fundamental laws of algebra, the correct application of the four basic mathematical operations on numbers as well as polynomial expressions, the use of percents, the conversion of measurements, and the derivation/solution of linear equations
- Assessment of classroom discovery activities for content knowledge and conceptual understanding.

Sample Assignments:

Outside-of-Class Reading Assignments

Read and synthesize information from the textbook and notes in order to make connections to the principles of arithmetic.

Outside-of-Class Writing Assignments

· Use the principles of arithmetic and problem solving strategies to solve application problems involving whole numbers, integers, fractions, mixed numbers, ratios and proportions.

Other Outside-of-Class Assignments

· Complete problem sets from the textbook and handouts that relate to linear equations from elementary

Course Materials:

All materials used in this course will be periodically reviewed to ensure that they are appropriate for college level instruction. Possible texts include the following:

Aufmann, Barker, Lockwood. Basic College Mathematics - An Applied Approach . 8th Houghton Mifflin

Company, 2006.
Bittinger, Marvin L. and Judith A. Beecher. Developmental Mathematics. 8th Addison–Wesley Publishing Company, 2012.

MyMathLab. Software. 2012. Pearson Education,

MathXL software. Software. 2001. Addison-Wesley Publishing Company,

Codes/Dates:

CB03 TOP Code: 1701.00 - Mathematics, General CB05 MOV Transfer Status: Non-Transferable (C) CB05 NOR Transfer Status: Non-Transferable (C) CB05 RIV Transfer Status: Non-Transferable (C)

Board of Trustees Approval Date: 04/17/2012

COR Rev Date: 04/17/2012

Generated on: 7/24/2019 5:03:49 PM

Discipline: Interdisciplinary Studies

Originator: Jami Brown

RIVERSIDE COMMUNITY COLLEGE DISTRICT INTEGRATED COURSE OUTLINE OF RECORD

INTERDISCIPLINARY STUDIES 3

ILA-3: Student Resiliency

College: NOR Lecture Hours: 18.000 Units: 1.00 Letter Grade

Course Description

Prerequisite: None

Course Credit Recommendation: Non-Degree Credit

This participatory course trains students how to attain, foster, and utilize skills that may support academic success in the face of adversity. The course includes theories of resiliency, workshops on strategies for resilience and academic success, problem-solving applications, and network building. 18 hours lecture. (Non-degree credit

Short Description for Class Schedule

This participatory course trains students how to attain, foster, and utilize skills that may support academic success in the face of adversity.

Entrance Skills:

Before entering the course, students should be able to demonstrate the following skills:

Student Learning Outcomes:

Upon successful completion of the course, students should be able to demonstrate the following skills:

- 1. Identify realistic personal and academic goals.
- 2. Identify the conditions that help people become more resilient.
- 3. Create models to promote positive academic progress, reduce the risk of failure, and encourage adaption in the academic environment.

Course Content:

- 1. The Foundations of Resiliency
 - a. Identification of stress and crises
 - b. Environmental factors: Family, work, school, peers, religion, social class
- Expectations for Success
 a. "Growth mindset" vs. "fixed mindset"
 - b Mindset and academic achievement
 - c. Mindset and leadership
- 3. Learning to Be Resilient
 - a. The nature of change: Making decisions
 - b. Recognition of and overcoming perceived boundaries
 - Creation and utilization of networks
- d. Promotion of self esteem

Methods of Instruction:

Methods of instruction used to achieve student learning outcomes may include, but are not limited to, the following activities:

- Mini-lectures to impart information and elaboration of assigned reading.
- Classroom discussion of topics covered in handouts, books, etc., to promote students' understanding of the material.
- Small-group activities focused on developing resilience: Social competence, problem-solving, communication skills, self-awareness, and positive thinking.

Methods of Evaluation:

Students will be evaluated for progress in and/or mastery of student learning outcomes using methods of evaluation which may include, but are not limited to, the following activities:

- Student journals to track progress and understanding of resilience.
- Written and/or oral assignments to assess students' skills in communication, problem solving, and coping mechanisms.
- Quizzes to measure students' retention and understanding of class material.

Sample Assignments:

Outside-of-Class Reading Assignments

- · Read the text and journal about the reading material as it relates to one's personal experience(s).
- Read a case study about a person experiencing an adversity and discuss strategies to overcome the adversity.

- Create a journal entry that reflects on adversities you have experienced in the past.
- · Create a journal entry that develops strategies to overcome those past adversities.

Other Outside-of-Class Assignments

- Complete the mindset survey. Summarize your typical mindset.
- Research web resources available to overcome a given obstacle or difficulty. Share those resources with your classmates.

Course Materials:

All materials used in this course will be periodically reviewed to ensure that they are appropriate for college level instruction. Possible texts include the following:

Dweck, Carol S.. Mindset, the new psychology of success. Ballantine Books, 2006.

Codes/Dates:

CB03 TOP Code: 4999.00 - Other Interdisciplinary Studies CB05 MOV Transfer Status: N/A (not in college inventory) (D) CB05 NOR Transfer Status: N/A (not in college inventory) (D)

CB05 RIV Transfer Status: Non-Transferable (C)

Board of Trustees Approval Date: 12/08/2015 **COR Rev Date:** 12/08/2015

Generated on: 7/24/2019 5:08:08 PM

Discipline: English
Originator: Thatcher Carter

RIVERSIDE COMMUNITY COLLEGE DISTRICT INTEGRATED COURSE OUTLINE OF RECORD

ENGLISH 91

ENG-91: Academic Support for English 1A

College: NOR Lecture Hours: 36,000 Units: 2,00 Pass/No Pass

Course Description

Prerequisite: None

Corequisite: ENG-1A or ENG-1AH

Course Credit Recommendation: Non-Degree Credit

Limited to students concurrently enrolled in the co-requisite English 1A class, English 91 provides students with additional support for college-level English. This 2-unit class offers additional instruction and practice in reading strategies, writing process, sentence craft, metacognitive reflection, and college success skills. 36 hours lecture. (Non-degree credit course. Pass/No Pass only.)

Short Description for Class Schedule

Additional support for reading, writing, and college success skills for students concurrently enrolled in the corequisite English 1A class.

Entrance Skills:

Before entering the course, students should be able to demonstrate the following skills:

- Write unified, well-organized, text-based essays of various lengths, applying a variety of rhetorical strategies with arguable theses and persuasive support, free of disruptive errors.
 - ENG-1A Write unified, well-organized, text-based essays of various lengths, applying a variety of rhetorical strategies with arguable theses and persuasive support, free of disruptive errors.
 - ENG-1AH Write unified, well-organized, text-based essays of various lengths, applying a variety
 of rhetorical strategies with arguable theses and persuasive support, free of disruptive errors.

Course Objectives:

Upon successful completion of the course, students should be able to demonstrate the following activities:

- Apply various pre- and post- reading strategies and other deliberate comprehension and note-taking strategies during reading to a variety of texts.
- Develop and explain legitimate inferences from specific texts and specific data.
- 3. Generate ideas for writing.
- Compose early drafts of writing.
- Demonstrate awareness of the writing process by determining and applying appropriate rhetorical strategies for organizing and developing different writing assignments.
- 6. Review instructional feedback and apply strategies for revision.
- 7. Demonstrate the ability to critically analyze and reflect metacognitively on their own own writing.
- 8. Apply proofreading strategies for clarity, coherence, and concision.
- Reflect on personal obstacles to academic success, and using various growth-mindset related insights, brainstorm how to overcome them.
- 10. Find resources on campus to help navigate obstacles and achieve success.

Student Learning Outcomes:

Upon successful completion of the course, students should be able to demonstrate the following skills:

- 1. Employ critical reading strategies for active reading of nonfiction texts.
 - Critical Thinking: Students will be able to demonstrate higher-order thinking skills about issues, problems, and explanations for which multiple solutions are possible. Students will be able to explore problems and, where possible, solve them. Students will be able to develop, test, and evaluate rival hypotheses. Students will be able to construct sound arguments and evaluate the arguments of others.
- Reflect on personal study habits and ability to access college support services in order to make plans for academic success.
 - Self-Development & Global Awareness: Students will be able to develop goals and devise strategies for personal development and well-being. They will be able to demonstrate an understanding of what it means to be an ethical human being and an effective citizen in their awareness of diversity and various cultural viewpoints.
- Apply scaffolded principles of the writing process (planning, drafting, instructional feedback, revision, and editing) to strengthen English 1A compositions.
 - Communication Skills: Students will be able to communicate effectively in diverse situations.
 They will be able to create, express, and interpret meaning in oral, visual, and written forms. They
 will also be able to demonstrate quantitative literacy and the ability to use graphical, symbolic, and
 numerical methods to analyze, organize, and interpret data.

Course Content:

The following topics are included in the framework of the course but are not intended as limits on content. The order of presentation and relative emphasis will vary by student need and instructor discretion:

- 1. Critical Reading Skills/ Comprehension of nonfiction texts
 - a. Prereading Strategies

- i. Previewing the genre and purpose of a text, its situation in a larger context, the likely biases and goals of its authors, and its potential difficulty;
- ii. Reflecting on relevant background knowledge and experience;
- iii. Establishing a purposeful approach to the reading by generating appropriate questions, key terms, lists, etc.
- b. Active and post-reading reading strategies
 - i. Establishing habits of active engagement, annotation, note-taking, consulting reference works, and questioning:
 - ii. Monitoring reading strategies, including strategies for working with difficult passages and for recognizing and marking points of poor or uncertain comprehension for later questioning;
 - iii. Identifying rhetorical strategies of a text, including appeals to logos, ethos, pathos, cues of structure and coherence (headings, spacing, transitions, and signposts), the overall pattern of organization, the strategic function of subsections;
 - iv. Distinguishing main ideas from support, claims from data, and the positions a text is advancing from those to which it is responding;
 - v. Situating the text in relation to personal experience, general knowledge, and other sources;
 - vi. Writing back to a text about the content and reading process (i.e. conceding, acknowledging, doubting, challenging, puzzling over, registering discomfort, affirming, inferring, exploring implications, weighing evidence);
- vii. Increasing confidence and stamina in reading;
- Critical Thinking in Response to Readings
 a. Reading nonfiction texts with and against the grain
 i. Summarizing and paraphrasing;
 ii. Drawing inferences and understanding implications;
 - iii. Responding to texts;
 - b. Evaluating nonfiction texts
 - i. Questioning validity, credibility, and logic of a written argument;
 - ii. Evaluating text's relevance to the students' larger projects in English 1A;
 - c. Applying textual material to a larger project
 i. Identifying key quotations and creating "quote sandwiches" for larger projects in English 1A;
 - ii. Putting texts into conversation with experience and other sources and understanding them in the context of some overarching question, problem, theme, or investigation;
- 3. Academic Composition Skills
 - a. Process
 - i. Reviewing and discussing nonfiction texts in order to write about them;

 - ii. Prewriting and idea generation for assignments in English 1A;
 iii. Planning and organizing compositions in conjunction with the English 1A prompt for that
 - iv. Selecting sources from texts and integrating them into writing;
 - v. Applying MLA conventions for correctly documenting sources and citing parenthetically;
 - vi. Anticipating audience objections and needs in writing compositions;
 - vii. Using peer- and self-reviews to improve writing;
 - viii. Revising compositions for form and content;
 - ix. Proofreading, editing, and polishing compositions for English 1A;
 - b. Rhetorical strategies
 - i. Understanding and implementing academic tone;
 - ii. Formulating arguments and avoiding fallacies;
 - iii. Developing logical organizational patterns for compositions without relying on formulaic approaches to essay writing;
 - iv. Understanding the purpose of composition and its likely effect on an audience;
 - c. Editing and Proofreading
 - i. Reviewing grammatical issues identified in student writing;
 - ii. Editing compositions, collaboratively and individually
 - iii. Learning to use one-on-one instructor consultations and revising sessions to improve compositions in English 1A.
- 4. Student and College Success Skills
 - a. Understanding and applying theories of growth mindset, college fear factor, perseverance, and motivation;
 - b. Using metacognitive reflection in order to identify and overcome obstacles;
 - c. Implementing strategies of time management;
 - d. Understanding how to apply skills form English 1A and English 91 to other classes or careers;
 - e. Understanding how to create effective counselor visits; f. Understanding how to use academic advising;

 - g. Understanding how to use campus support and academic services, including tutoring, Health Services, Writing and Reading Center, Disability Resource Center, supplemental instruction, faculty advisors, and instructor office hours;
 - h. Engaging in one-to-one advising on the completion of the college's English requirement. For example, if a student is not going to pass English 1A, the instructor can work with the student to find the next best class to take, whether that is a repeat of English 1A or a choice to take a prerequisite to English 1A.

Methods of Instruction:

Methods of instruction used to achieve student learning outcomes may include, but are not limited to, the following activities

This class is taught in conjunction with the co-requisite English 1A; therefore, many of the reading and writing assignments will originate in English 1A. This class will meld seamlessly with the co-requisite English 1A class, providing additional time and support for students completing their English 1A assignments.

- Ice-breakers or team-building activities to foster a trusting, respectful, and intellectually challenging
- Mini lectures or presentations on the topics listed above;
- Active class discussions, including "speed dating" and other low-stakes methods to discuss the texts assigned in English 1A:
- Modeling of active reading techniques, brainstorming, paragraph construction, or other foundational skills;
- In-class writing to generate material for English 1A assignments or further metacognitive understandings of the student's own writing process;
- Guided peer- and self-reviews;
- Small-group discussions of readings or collaborative writing projects;
 Student presentations, demonstrations, and lectures to demonstrate understanding of concepts, writing, and reading strategies:
- Investigation of student's affective domain considerations, connecting with students to create a positive learning environment, and following up with them to create accountability;
- Student-teacher conferences for guided practice of reading and writing strategies and for student awareness of progress in meeting course goals and performing course outcomes.

Methods of Evaluation:

Students will be evaluated for progress in and/or mastery of student learning outcomes using methods of evaluation which may include, but are not limited to, the following activities:

Pass or no pass is based on the application of strategies and active engagement more than the final product.

- Participation in writing process activities related to assignments in English 1A;
- Evidence of focused practice of reading strategies, writing strategies, or sentence craft;
- Summaries, paraphrases, reading responses;
- Presentations (individual or collaborative) on readings, themes, practices, on-going projects;
- Reflective writing and other evidence of metacognition;
- Final examination.

Sample Assignments:

Outside-of-Class Reading Assignments

Reading assignments will mostly originate in the co-requisite English 1A, but the assignments in English 91 could include excerpts from College Fear Factor, Mindset, The Habit Loop, Habits of Mind, or other useful texts for helping students imagine their best path toward and around obstacles to academic success.

For example:

- · Read and understand the excerpt from Rebecca Cox's The College Fear Factor: How Students and Professors Misunderstand Each Other, and be prepared to discuss it in class.
- Read Chapter One of Carol Dweck's Mindset: The New Psychology of Success, and complete the prereading and post-reading activities.
- Read the chapter "The Habit Loop" from Duhigg's The Power of Habit to examine model paragraphs and identify strengths and/or weaknesses in the writing

Outside-of-Class Writing Assignments

Writing assignments will mostly originate in the co-requisite English 1A, but the assignments in English 91 could include metacognitive reflections, self-reviews, plans of action, responses to reading selections, summaries, paraphrases, quote sandwiches, and/or quizzes on the nonfiction texts assigned in English 1A.

For example:

- Find a quiet place, and for ten minutes, write about an obstacle you have encountered in your academic career and how you overcame it. If you have not yet overcome the obstacle, write about how you plan to. This assignment should be typed in the MLA format and brought to class.
- Transcribe a relevant sentence from the reading, and write a critical response. Write about why you like it, why you agree with it, why it speaks to you. You can write about what it makes you think about, what it reminds you of. This assignment should be typed in the MLA format and brought to class for a discussion
- on effective writing.

 Compose written reflections in response to peer and/or instructor feedback, detailing a revision plan for your essay.

Other Outside-of-Class Assignments

English 91 is designed to help students be successful in English 1A. Because many students are learning to be college students, English 91 should have assignments and activities to raise awareness of how to change personal habits and how to access resources on campus.

For example:

- · Visit the tutoring center, the Writing and Reading Center, or an SI session, and bring back a confirmation of the work you achieved in this 30-60 minute session.
- Bring your English 1A essay draft to office hours with three specific questions you would like answered. You can ask questions about your topic sentences, your use of quotations, your citations. or any other aspect of your essay.
- Keep track of your time for the next 48 hours; write down in detail every activity for each half-hour increment. Bring this to class for a guided metacognitive reflection.

Course Materials:

All materials used in this course will be periodically reviewed to ensure that they are appropriate for college level instruction. Possible texts include the following:

Carles Duhigg. The Power of Habit: Why We Do What We Do in Life and Business. Random House,

Carol Dweck. Mindset: The New Psychology of Success. Ballantine Books, 2007.
Daniel Pink. Drive: The Surprising Truth about What Motivates Us. Riverhead Books, 2011.

Mike Rose. Lives on the Boundary: A Moving Account of the Struggles and Achievements of America's Educationally Unprepared. Penguin Books, 2005.

Rebecca Cox. The College Fear Factor: How Students and Professors Misunderstand Each Other. Harvard University Press, 2011.

Codes/Dates:

CB03 TOP Code: 1501.00 - English

CB05 MOV Transfer Status: Non-Transferable (C) CB05 NOR Transfer Status: Non-Transferable (C) CB05 RIV Transfer Status: Non-Transferable (C)

Board of Trustees Approval Date: 04/17/2018

COR Rev Date: 04/17/2018