

El Monte Union High School District

Course Outline

District: EMUHSD

High School: _____

Course Title: Integrated Math
Readiness (MA391)

Textbook(s): None (Students are provided with a workbook with essential topics covered throughout the course)

Copyright date/Edition: N/A

Transitional* _____ (Eng. Dept. Only)

Sheltered (SDAIE)* _____ Bilingual* _____

AP** _____ Honors** _____

Department: _____ Math _____

CTE*** :
Industry Sector: _____
Pathway: _____

Check One
Introductory: _____
Concentrator: _____
Capstone: _____

Grade Level (s): Incoming 9th

Semester (Summer) Year _____

Year of State Framework Adoption _____

This course meets graduation requirements:

- () English
- () Fine Arts
- () Foreign Language
- () Health & Safety
- () Math
- () Physical Education
- () Science
- () Social Science
- (X) Elective

This course meets a-g requirements:

- () "a" – Social Studies
- () "b" – ELA
- () "c" – Math
- () "d" – Lab Science
- () "e" – Language (not English)
- () "f" – Vis/Perf Arts
- () "g" – College prep elective

Department/Cluster Approval Date

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Is this course an adaptation from another source?

- No
- Yes

If yes, please indicate the source of the original course:

*Instructional materials appropriate for English Language Learners are required.

For AP/Honors course **attach a page describing how this course is above and beyond a regular course. Also, explain why this course is the equivalent of a college level class.

***For CTE, **attach the CTE course outline** created in the online template (<http://ctecourse.scoe.net/>).

1. Prerequisite(s):

a. C or below in 8th Grade Common Core Math
AND

b. Incoming 9th Grade students only

NOTE: Not recommended for incoming 9th grade students who have previously taken Integrated Math 1 in the 8th grade.

2. Short description of course which may also be used in the registration manual:

▪ **Objectives of course**

- Integrated Math Readiness is a one semester summer course intended to provide incoming 9th grade students additional support in mathematics by covering prerequisite skills/concepts needed for Integrated Math 1.

▪ **3-5 sentences explaining overall course content**

- The Integrated Math Readiness consists of 3 components: Student Workbook, Performance Tasks, and ALEKS usage.
 1. **Student Workbook:** The workbook provided to students consists of prerequisite topics that are determined by Content Specialists to be essential topics in order to prepare students for Integrated Math 1. The resources are from the Houghton Mifflin Harcourt (HMH) Response to Intervention supplementary resources. Essential topics include operations with integers, solving linear equations and inequalities, modeling mathematics using algebraic expressions and equations, understanding angle relationships in Geometry, rate of change/slope, and how to use the midpoint/distance formulas. Below is a link to the student workbook that was used for the summer of 2018:
 - a. <https://goo.gl/bzL7UL>
 2. **Performance Tasks:** There will be 5 performance tasks given to students throughout the course. The performance tasks follow the same structure and are similar to the CAASPP performance tasks. The intent of the performance tasks is to further promote critical thinking and problem solving skills. Below is a link to the performance tasks that were used for the summer of 2018:
 - a. <https://goo.gl/MQWC3E>
 3. **ALEKS:** ALEKS is an adaptive online learning program. Every student in Integrated Math Readiness will be enrolled in the Algebra Readiness course in ALEKS and will be provided with a personalized learning path that will further identify and support each student's needed areas of growth. Students will be provided with 1 hour of class time per day to work on their ALEKS topics. Below is a link to the list of topics covered in the Algebra Readiness ALEKS course:
 - a. <https://goo.gl/RWA8kR>

- **Indicate references to state framework(s)/standards (If state standard is not applicable then national standards should be used)**
- **Student performance standards**
 - Common Core Standards for Mathematical Practices:
 - Make sense of problems and persevere in solving them
 - Reason abstractly and quantitatively
 - Construct viable arguments and critique the reasoning of others
 - Model with mathematics
 - Use appropriate tools strategically
 - Attend to precision
 - Look for and make use of structure
 - Look for and express regularity in repeated reasoning
 - Guidelines for Grading:
 - A 90-100%
 - B 80-89%
 - C 70-79%
 - D 60-69%
 - F 59% and Below
- **Evaluation/assessment/rubrics**
 - Formative and Summative Assessments
 - Chapter/Module Tests
 - Quizzes
 - Homework/Classwork Practice
 - Performance Tasks
 - ALEKS Time/Topic/Pie Goals
- **Include minimal attainment for student to pass course**
 - Students must attain at least 60% D- overall average for all assignments (Tests, Quizzes, Homework, Classwork, Performance Tasks, ALEKS usage, etc).

3. Course content:

Integrated Math Readiness Content Guide

| ALEKS (30%) - LEARNING PATH COMPLETION | SKILLS ASSIGNMENT (15%) | SKILLS POST TEST (30%) | Final Exam (10%) | PERFORMANCE TASK (15%) |
|--|---|--|--|--|
| Day 1 <ul style="list-style-type: none"> Introduction <ul style="list-style-type: none"> Syllabus ALEKS Overview ALEKS (1hr) | Day 3 <ul style="list-style-type: none"> ALEKS (1hr) Skills 1 & 12 Post Test | Day 5 <ul style="list-style-type: none"> ALEKS (1hr) Skill 2: Alg Expr Skill 13: 1-Step Equations | Day 7 <ul style="list-style-type: none"> ALEKS (1hr) Skills 16 & 2 Post Test PT: 6th Grade YouTube | Day 9 <ul style="list-style-type: none"> ALEKS (1hr) Skill 22: 2-Step Ineq Skill 11: Multi-Step Eq |
| Day 2 <ul style="list-style-type: none"> ALEKS (1hr) Skill 1: Add/Subt Int Skill 12: Mult/Div Int | Day 4 <ul style="list-style-type: none"> ALEKS (1hr) Skill 16: Real #'s PT: 6th Grade Fundraiser | Day 6 <ul style="list-style-type: none"> ALEKS (1hr) Skill 14: 1-Step Inequalities | Day 8 <ul style="list-style-type: none"> ALEKS (1hr) Skills 13 & 14 Post Test Skill 21: 2-Step Eq | Day 10 <ul style="list-style-type: none"> ALEKS (1hr) CATCH-UP |
| Day 11 <ul style="list-style-type: none"> ALEKS (1hr) Skills 21, 22, & 11 Post Test | Day 13 <ul style="list-style-type: none"> ALEKS (1hr) Skill 20: Slope Skill 45: Rate of Change/Slope | Day 15 <ul style="list-style-type: none"> ALEKS (1hr) Skills 8, 20, & 45 Post Test PT: 7th Grade Amusement Park | Day 17 <ul style="list-style-type: none"> ALEKS (1hr) Skill 47: Eq of Parallel and Perp lines Skill 31: Squares and Square Roots | Day 19 <ul style="list-style-type: none"> ALEKS (1hr) CATCH-UP |
| Day 12 <ul style="list-style-type: none"> ALEKS (1hr) Skill 8: Unit Rate/Slope PT: 7th Grade Movie Night | Day 14 <ul style="list-style-type: none"> ALEKS (1hr) Skill 10: Linear Func. Skill 46: Slope and y-int | Day 16 <ul style="list-style-type: none"> ALEKS (1hr) Skills 10 & 46 Post Test Skill 24: Writing Linear Equations | Day 18 <ul style="list-style-type: none"> ALEKS (1hr) Skill 38: Distance/Midpoint Formula Skill 34: Angle Relationships | Day 20 <ul style="list-style-type: none"> ALEKS (1hr) Skills 24 & 47 Post Test |
| Day 21 <ul style="list-style-type: none"> ALEKS (1hr) Skills 31, 38 & 34 Post Test | Day 23 ALEKS COMPREHENSIVE KNOWLEDGE CHECK (FINAL EXAM) End of Session | | | |
| Day 22 <ul style="list-style-type: none"> ALEKS (1hr) PT: 8th Grade Family Vacation | | | | |

4. Describe how this course integrates the schools SLO (former ESLRs- Expected School-wide Learning Results):

- a. Academic Achievers: Students will further develop reading and writing skills via Performance Tasks.
- b. Critical Thinkers: Students will use critical thinking skills in their reading analysis and their various writing assignments.
- c. Technology Competent Users: Students will use technology on ALEKS.

- d. Ethical, Respectful Individuals: Students will be respectful while working in diverse collaborative groups.
- e. Active Community Participants: Students will develop skills that will increase their ability to participate in the community.

5. Describe the Integrated ELD teaching techniques to be used to meet the needs of English Language Learners:

- a. Oral and academic language development will be utilized.
- b. Study skills and Cornell notes will be emphasized.
- c. RESEARCH BASED strategies and activities such as SIOP, AVID, metacognitive strategies, Marzano strategies, and Kinsella strategies will assist student learning.
- d. Prior knowledge will be used to build connections and support new learning.
- e. Vocabulary and content development will be highlighted.
- f. Graphic organizers, visuals, realia, audio, and technology software will be utilized during instruction in order to support multiple learning modalities and Universal Design for learning.
- g. Multiple teaching models will be utilized: Concept Attainment Model (CAM), Concrete-Pictorial-Abstract Model (CPAM), Explicit Direct Instruction
- h. Engagement routines such as think-write-pair-share, text mark-up, and group and paired work.
- i. Writing support scaffolds such as sentence-framing and paragraph-framing will be utilized.
- j. Reasoning and justifying answers will be highly encouraged.
- k. Flexible instructional organization for whole-class, group, paired and individualized learning will be implemented.

6. Describe the interdepartmental articulation process for this course:

Interdisciplinary articulation is ongoing and driven by a common need to improve mathematical competency skills school-wide. Continuous collaboration with the Science department will be implemented to reinforce application and utilization of mathematical skills across content areas.

7. Describe how this course will integrate academic and vocational concepts, possibly through connecting activities. Describe how this course will address work-based learning/school to career concepts:

Connections will be drawn between skills taught and practiced in this course to applications in various careers and to college readiness. Problem solving application and performance tasks will be emphasized. Students will be taught fundamental career skills such as reasoning, communicating, analyzing data, modeling, and interpretation and solving mathematical problem.

Supplemental Materials of Instruction

(Note: Materials of instruction for English Language Learners are required and should be listed below.)

| Type of material (book, manual, periodical, article, website, primary source document, etc.) | Publisher | Edition/ Year | URL | Primary book, read in its entirety? (Y/N) |
|---|--|--------------------------|------------------------------|--|
| HMH Integrated Math 1 CA Response to Intervention Teacher Resources | Houghton Mifflin Harcourt Publishing Company | 2015 | | N |
| ALEKS Learning Software | McGraw Hill Publishing | | www.aleks.com | |
| Teacher Created Performance Tasks | | | See links from Content Guide | |
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