

MATH 12: ALGEBRA FOR STEM COURSES

In Workflow

1. MATH Committee Chair (taylorlm@csus.edu)
2. MATH Chair (kelce@skymail.csus.edu)
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9. Catalog Editor (catalog@csus.edu)
10. Registrar's Office (w lindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Tue, 13 Sep 2022 00:34:08 GMT
Lisa Taylor (taylorlm): Approved for MATH Committee Chair
2. Mon, 19 Sep 2022 16:02:00 GMT
Kimberly Elce (kelce): Approved for MATH Chair
3. Wed, 21 Sep 2022 22:50:05 GMT
Mikkel Jensen (mikkel.jensen): Approved for NSM College Committee Chair
4. Wed, 21 Sep 2022 23:35:42 GMT
Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted: Tue, 13 Sep 2022 00:27:15 GMT

Viewing: MATH 12 : Algebra for STEM Courses

Last edit: Tue, 13 Sep 2022 00:27:14 GMT

Changes proposed by: Lisa Taylor (101035034)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Lisa Taylor	taylorlm@csus.edu	916-278-7075

Catalog Title:

Algebra for STEM Courses

Class Schedule Title:

Algebra for STEM Courses

Academic Group: (College)

NSM - Natural Sciences & Mathematics

Academic Organization: (Department)

Mathematics & Statistics

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective:

Spring 2023 (2022/2023 Catalog)

Subject Area: (prefix)

MATH - Mathematics

Catalog Number: (course number)

12

Course ID: (For administrative use only.)

147116

Units:

4

Is the primary purpose of this change to update the term typically offered or the enforcement of prerequisites at registration?

No

In what term(s) will this course typically be offered?

Fall, Spring, Summer

Does this course require a room for its final exam?

Yes, final exam requires a room

This course complies with the credit hour policy:

Yes

Justification for course proposal:

The name of the course has been changed from Algebra for College Students. The syllabus has been updated to reflect the elimination of the prerequisite of the ALEKS PPL exam, per by EO 1110, and now requires no prerequisite.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

Prepares students for Precalculus and other higher math courses requiring intermediate algebra. Topics include: linear equations and inequalities, absolute value equations and inequalities, systems of linear equations, quadratic equations, polynomial expressions and equations, rational expressions and equations, roots and radicals, and exponential & logarithmic properties and equations.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Is this course designated as Curricular Community Engaged Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

Students who have received a C- or higher in a college level precalculus or calculus course are not eligible to enroll for credit without the permission of the instructor.

Does this course have prerequisites?

No

Does this course have corequisites?

No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Lecture

Lecture Classification

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

Lecture Units

4

Is this a paired course?

No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes and Assessment Strategies:

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Solve linear equations and inequalities with applications	Homework, quizzes, exams, comprehensive final
2	Solve absolute value equations and inequalities	Homework, quizzes, exams, comprehensive final
3	Solve systems of linear equations in two variables with applications	Homework, quizzes, exams, comprehensive final
4	Solve quadratic equations	Homework, quizzes, exams, comprehensive final
5	Manipulate polynomial expressions and solve polynomial equations with applications	Homework, quizzes, exams, comprehensive final
6	Manipulate rational expressions and solve rational equations with applications	Homework, quizzes, exams, comprehensive final
7	Manipulate expressions involving radicals and solve equations involving radical expressions	Homework, quizzes, exams, comprehensive final
8	Manipulate between equivalent exponential and logarithmic forms and solve exponential and logarithmic equations.	Homework, quizzes, exams, comprehensive final

Attach a list of the required/recommended course readings and activities:

Math 12 readings and activities.pdf

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals**Undergraduate Learning Goals:**

Competence in the disciplines

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Please attach any additional files not requested above:

Math 12 Syllabus final 2022 5-10.pdf

Key: 3189