

NROC Algebra 1

VERSION 1.1

Developed by: The NROC Project, with generous funding from the The William and Flora Hewlett Foundation

Audience: Middle and High School

WHY NROC?

NROC's high-quality courses are **media-rich**, **adaptable** and **affordable**, a combination of features not readily available from commercial providers. With rich content mapped to state and federal standards, NROC courses can be used with or without a textbook to enhance online, blended and face-to-face learning environments.

Teaching with the Power of Digital Media



COURSE DESCRIPTION

This two-semester Algebra 1 course has been developed for first-time algebra students with a broad range of ability levels, from remedial to advanced. The content is correlated to all US state algebra frameworks and The Common Core. This course can be used as a stand-alone or as a supplement to any algebra textbook.

The flexible, learner-centered approach offers a portfolio of learning objects designed to open the door to mathematics concepts, procedures, mathematical reasoning and critical thinking for learners.

Students work through activities in a sequence that leverages their own successful learning strategies while building their 21st century skills.

For more details about this program and to see our diverse use cases, visit NROCmath.org

COURSE COMPONENTS INCLUDE:

- **Warm-up:** a series of problems to assess prior knowledge, resulting in customized recommendations for review.
- **Presentation:** a rich media presentation introducing the topic concept with illustrated examples and optional closed caption [CC] script.
- **Worked Examples:** narrated, step-by-step presentation of problems being solved.
- **Practice Problems:** symbolic and word problems designed in adaptive sets, offering students practice and feedback.
- **Topic Text:** integrated textbook provides comprehensive coverage of topics with additional explanations and examples.
- **Review:** self-test understanding prior to moving to the next topic.
- **Project:** collaborative assignments in the project-based learning tradition based on real-world problems.
- **Tutor Simulation:** offers students directed guidance in solving a multi-faceted problem.
- **Puzzles:** simple activities offer learners an opportunity to practice what they have learned in a fun, no-fault environment.
- **Assessments:** formative and summative assessments are designed to guide a learner's progress.

The NROC Project (NROC) is a community-guided, non-profit project funded by The William and Flora Hewlett Foundation, the Bill & Melinda Gates Foundation, and most importantly by NROC members across the country. If your organization would like to integrate this content into your institutional curriculum, please contact us for information about NROC membership at membership@theNROCproject.org.

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Writing, Solving and Graphing Inequalities in One Variable
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Solving and Graphing Linear Inequalities in Two Variables

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Graphing Systems of Inequalities

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