A.3.2 Course Offerings and Graduation Requirements

a) Graduation Requirements

The below table summarizes the minimum credit requirements for high school graduation in Arizona for the graduating class of 2013 and beyond. NAS-Phoenix will not require any additional credits for graduation.

Subject	Arizona requirement	NAS-Phoenix
English	**4**	**4**
Mathematics	**4**	**4**
Science	**3**	**3**
Social Studies	**3**	**3**
CTE/Fine Arts	**1**	**1**
Electives	**7**	**7**
Totals	**22**	**22**

Mathematics courses shall consist of Algebra I, Geometry, Algebra II (or its equivalent), Pre-Calculus or an additional course with significant math content as determined by NAS-Phoenix Governing Council. Students who have not earned formal credit in Algebra I and Geometry but who have covered the course content described in State Board of Education administrative rule R7-2-302 will be deemed to have met the requirement for graduation. The Algebra II requirement may be modified using a Personal Curriculum as outlined in R7-2-302.03.

Three credits of science in preparation for proficiency at the high school level on the Arizona's Instrument to Measure Standards (AIMS) or other equivalent test are required. Students will select three courses from Earth Science, Biology, Physical Science, Chemistry and Physics.

Social Studies shall consist of one credit of American History, one credit of World History/Geography, one-half credit of government and one-half credit of economics.

b) Awarding Course Credit

NAS-Phoenix will operate on a quarterly schedule. All students will take a minimum of 6 courses throughout the school year. Since NAS-Phoenix will enroll students four times per year, credits will be awarded at the end of each quarter and will have a value of 0.25 per quarter per course.

Formative assessment will occur on a daily basis and will include classroom participation, homework assigned, quizzes, board work, small and large group observations, unit tests, and a daily exit ticket (a short problem to ensure understanding of learned content objectives). These assessment instruments will compromise 80% of the quarter's final grade. The final end of quarter exam will have a weighted value of 20%. These two component grades will determine a final end of quarter grade. Although the school will only use a numerical grade, the equivalent letter grade will be: A=90-100%, B=80-89%, C=70-79%, D=60-69%.

The minimum grade to award a credit will be a "C". If a "C" is not achieved, students are afforded the opportunity to participate in a credit recovery program that enables them to demonstrate proficiency in missed standards for the quarter.

Each quarter's grade will be independent of other quarters. This ensures that if a student leaves school earned quarter credits will not be lost.

NAS-Phoenix believes that grades should be:

Accurate – The same piece of student work receives the same grade regardless of who the teacher is.

Fair – Differences in grades should reflect variations in the quality of work, not differences in gender, ethnicity, or social class.

Timely – Students and parents should be told about grades early enough to correct problems.

Specific – Students should get detailed information about how to improve, not just a summative grade or comment.

NAS-Phoenix monitors academic progress very closely. Students at risk of failing to master standards will be provided ample opportunities for re-teaching and intervention to ensure learning. Further, a counselor will meet with each student at least once per quarter. This gives the counselor an opportunity to intervene with the student and parents to ensure proper supports are in place to maximize student success.

c) Consistency with Area II of the Academic Systems Plan.

Assessment principles outlined in Area II of the ASP, including but not limited to the use of multiple assessments, formative and summative assessments, assessments that differentiate between student subgroups to inform and adjust instruction and to evaluate student growth will be applied in each course described below, with school administrators conducting regular evaluation of instructors to insure fidelity to these principles.

d) Menu of Course Offerings[1]

Grades	**9**	**10**	**11**	**12**
	Algebra I	Geometry	Algebra II	Pre-Calculus
	English 9	English 10	English 11	English 12
	Earth Science	Biology	Chemistry	Physics
	Government	US / Arizona History	Public Speaking (Elective)	World History/Geography
	Economics	Health	Spanish 2 (Elective)	Creative Writing (Elective)
	Physical Education	Spanish 1	Elective	Fine Arts
	Principles of Mathematics	Introduction to Technology (Elective)	Elective	
	Elective	Business Mathematics		
	ESL (1-3)	ESL (1-3)	ESL (1-3)	

[1] Upper schedule only applies to students who are not placed into the four-hour intensive English Newcomer program. These students are gradually integrated into mainstream content courses as their English proficiency improves.

ESL PROGRAM

Because NAS-Phoenix anticipates that a great number of our students will either be immigrants, recent immigrants or students who lack English language proficiency, the ESL program is a necessary and vital component of our program of instruction.

New immigrants and other students who lack proficiency in the English language are placed in a four hour intensive English as a Second Language program in order to prepare them for full participation in our standards based curriculum. As students become more efficient in the English language, the number of hours per day in the program is reduced and the students are gradually integrated into the core subject areas. Students can received a maximum of four credits for this program as described below:

- ESL 1 – a four hour English block per day. The beginner English speakers are placed in this class for an entire year, and then begin to transition into other sheltered content and/or elective classes during their second semester, or at the start of the next school year.
- ESL 2 – a two hour English block per day. Students have two hours of intensive English instruction, as well as take three or four sheltered content and elective courses. Many of the ESL 2 students take an additional English elective class to strengthen their English skills.
- ESL 3 – a one hour English class. This class serves as a preparation and transition for students as they move into language arts classes. The majority of students in ESL 3 take an additional English elective class to strengthen their English skills.

Also, given the population that we will be serving, all classes (listed in the menu below)—both ESL and mainstream content courses; and core subject matter courses and electives—are informed by Sheltered Instruction, a proven research-based pedagogy. Sheltered Instruction's two inter-related goals are: to provide access to mainstream, grade-level content and to simultaneously promote the development of English language proficiency.[2]

ENGLISH 9. English 9 builds upon 8th grade reading, writing, listening, speaking and critical thinking. Thematic literature collections are related to personal experiences. Reading comprehension strategies and control of the six traits of writing are emphasized. Active listening and speaking are practiced in formal and informal situations. A variety of media presentations is evaluated for social and cultural messages.

ENGLISH 10. This course continues to refine and expand skills developed in English 9. Thematic collections of world literature, with an emphasis on universal themes, are presented. The six traits of writing are further refined in the context of narrative and expository writing. MLA guidelines are introduced. The political and economic consequences of media forms are investigated.

ENGLISH 11. English 11 continues the study of structural elements of fiction and nonfiction through the analysis of literary periods and their subsequent social values. The literature of the United States and the Americas is emphasized. The six traits of writing are refined in the context of analytical and persuasive writing. Students engage in self-evaluation and respond to audience feedback on their speaking and listening skills. Media forms are examined for their impact on all aspects of society.

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[2] In addition to helping English Language Learners develop both content and language proficiency, Sheltered Instruction has been proven effective with underperforming students (another segment of our target population) as in Sheltered classes, teachers use clear, direct, simple English and a wide range of scaffolding strategies to communicate meaningful input in the content area to students. Learning activities connect new content to students' prior knowledge, require collaboration among students, and spiral through curriculum material.

ENGLISH 12. English 12 is the final course in the series of required English courses. The curriculum uses international classics, with emphasis on British literature, to provide a world view of mankind throughout the centuries and across the regions of the world. Proficiency in all six traits of writing is expected in all writing forms. Research findings are presented using MLA style in a research paper. A comparison of the impact of multiple media forms on society is studied.

CREATIVE WRITING. Creative writing is for those who wish to express themselves creatively and imaginatively in such literary forms as the short story, poem and one-act play. Individual interest and talent will determine the writer's field, but emphasis will be given to writing the short story.

PUBLIC SPEAKING. This course encourages students to use the experience and knowledge they have about communicating with others and to build new communication skills. Students will learn to recognize and utilize research, organization, composition, delivery and evaluation. These goals will be accomplished through individual and group speaking experiences.

PRINCIPLES OF MATHEMATICS. The Principles of Mathematics course is designed to strengthen students' algebraic skills and will provide a strong foundation for Algebra 1. Principles of Mathematics concept units include number sense, integers, graphing and solving linear functions, proportions, probability and data analysis. This course will count as an elective credit and not one of the compulsory math credits towards graduation.

ALGEBRA I. This course is designed to prepare students to meet the state graduation requirement and provide students with the mathematical background necessary to meet college entrance requirements. Concept units include solving, graphing and writing linear functions, system of equations, exponents, radicals, polynomials, quadratics and data analysis.

ALGEBRA II. This course is designed to provide students with the mathematical background necessary to meet college entrance requirements and is aligned with the Arizona College and Career Readiness Mathematics Standards. Concept units include systems of linear equations and inequalities, quadratics functions, properties of exponents, polynomial functions, power roots and radicals, exponential and logarithmic functions, rational equations and functions, and trigonometric ratios and functions.

GEOMETRY. This course is designed to prepare students to meet the state graduation requirement, and provide students with the mathematical background necessary to meet college entrance requirements. Concept units include coordinate geometry, perpendicular and parallel lines, logical reasoning, properties of triangles and quadrilaterals, transformations, quadratic relations, right triangle trigonometry, similar and congruent figures, two and three dimensional figures, circles and data analysis.

PRE-CALCULUS. This course is designed to prepare students to meet the state graduation requirement, and provide students with the mathematical background necessary to meet college entrance requirements. Concept units include functions and graphs, relations, inverses, conics, rational functions, exponential and log functions, base 2 and e, trig functions, identities and applications.

BIOLOGY. Biology is a laboratory science course designed to meet the Arizona and national standards for the inquiry process, history and nature of science, science in personal and social perspectives, and life science. Students will engage in scientific inquiry to uncover concepts related to cellular processes, interdependence of organisms and the environmental system, genetics, and the molecular basis of heredity, and the scientific principles and processes involved in biological evolution.

CHEMISTRY. Chemistry is a laboratory science course designed to explore matter and composition of the world. The major instructional areas are: identifying consistencies in experimental data, structure of matter as a key to chemical and physical properties, mole concept, and energy changes in matter,

conservation of energy, equilibrium systems and stoichiometric relationships. Laboratory work and scientific method are emphasized.

EARTH SCIENCE. Earth Science is a laboratory science course focusing on scientific inquiry, as it applies to the study of the earth and earth systems. Students will learn about the physical world in which we live and the manner in which the world is studied through critical thinking skills.

PHYSICAL SCIENCE. Physical Science includes the study of the basic concepts of chemistry and physics, as well as mathematical applications. Using problem-solving strategies, the scientific method, hands-on experiences and cooperative learning strategies, students acquire the abilities to do scientific inquiry and gain a knowledge base to support those inquiries.

PHYSICS. Topics include: motion, forces, energy, waves, light, electricity, magnetism, radioactivity, mechanical energy, nuclear physics and alternative energy sources. Major concepts are introduced through laboratory experiences.

GOVERNMENT. This course deals with national and state governments and describes how groups in our country give power to political institutions to make binding decisions for the good of society. The course analyzes civic life, politics and the basic forms of government; what the basic foundations of the American political system constitute; how government established by a constitution embodies the purposes, values and principles of American democracy. America's role in the world with other nations and the matters of world affairs are discussed. The concepts explored in this course will continue to prepare and empower students to make choices as responsible participants in society.

US / ARIZONA HISTORY. This course examines American culture, politics, environment and economy from the 1860s to the present day. The course's intent is to help students better understand the themes of history which shaped and continue to impact our lives. The concepts explored in this course will continue to prepare and empower students to make choices as responsible participants in society.

WORLD HISTORY / GEOGRAPHY. This course is designed to provide students with the skills and knowledge to understand the major concepts, characteristics, events and people of modern history (1500 - present). The course will include an overview of Western Civilization. Economic and political developments, geographic concepts, belief systems and cultural contributions are integrated into the curriculum.

PHYSICAL EDUCATION. In this course students learn basic and advanced skills. Specialized physical education activities are also offered at upper grade levels.

HEALTH. This course covers a variety of topics including safety education, environment, foods, drugs, exercise, accidents, diseases, immunization, nutrition and body care.

INTRODUCTION TO TECHNOLOGY. This course is designed to prepare students to use technology effectively. Topics include word processing, spreadsheet, presentation software, and desktop publishing. This course takes an integrated approach to teaching and learning to equip students with enhanced technical knowledge and skills associated with functions within the world of work.

ECONOMICS. This course is an introduction to the foundations and methods of economics. The course will examine the characteristics of different economic systems, the essential component of private property in a free-market environment, the role of government in the economy of the United States and the effects of international trade and development on our lives.

SPANISH 1 and 2. In the introductory course, emphasis is placed on the fundamentals of speaking and understanding basic Spanish. Reading about and discussing contemporary life in the Spanish-speaking world is a part of each lesson. Spanish 2 will provide students with opportunities to further develop Spanish literacy skills including writing, reading, listening, and speaking in complex situations.

In addition, each NAS student is required to perform six hours of service per year (non-credit bearing) as a condition of graduation. NAS believes that social service is a valuable aspect of a complete education. Working to develop a sense of community helps students realize the power that individuals have to contribute to the common good. In addition to providing students with a way to use their skills in a practical, purposeful manner, performing service to others reinforces for them the idea that education and responsibility go hand in hand. Moreover, this service requirement meets the needs of a large segment of our target population: new immigrants. These individuals will come to NAS both needing to learn core academic competencies and wanting to learn about American life and culture.

e. Consistency with Program of Instruction and alignment with Business Plan.

Instructional methodologies and assessment principles and mechanisms outlined in section A. 3 Program of Instruction will be applied in each course described above and each course will be designed to be in alignment with the Arizona College and Career Ready Standards per the NAS Curriculum Framework as described in said section.

Further, this Sheltered Instruction-informed program of instruction—designed to meet the needs of a population of new immigrants, English Language Learners and academically underserved students—is aligned with the Business Plan in that, as stated in the Business Plan (section C.3. Personnel):

> It is the intent of NAS to hire a faculty and staff that is aligned with the mission and vision of the school. NAS-Phoenix will recruit and hire employees who hold appropriate Arizona licensure and SEI endorsement… Every effort will be made through advertising and community outreach to attract ethnic minorities, especially bilingual English/Spanish speakers…
>
> In addition, to best serve its students, NAS-Phoenix will employ professionals whose background and teaching experience are relevant to English language acquisition and second-language learners.