

# Curriculum Overview

HIGH SCHOOL  
GRADES

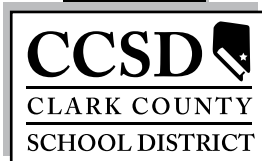
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CORE CURRICULUM

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**CCSD**   
CLARK COUNTY  
SCHOOL DISTRICT



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Dear Parents/Guardians,

This curriculum overview has been developed to help parents/guardians understand what is expected of students at each grade level in the core academic areas. These expectations take into account Nevada State Content and Performance Standards as students progress through a standards-based curriculum. Student progress is assessed on an annual basis for each specific course, with culminating proficiency examinations in writing, mathematics, and reading administered beginning in the spring of the student's sophomore year in school. The curriculum overview provides a general description of the concepts and skills to be taught at each grade level relative to specific courses. Information has been included outlining Nevada's State Content Standards, which have been developed to ensure all of Nevada's students are provided a quality education. Additionally, the Clark County School District POWER STANDARDS for English Language Arts/Reading, Mathematics, and Science are included in this document. Power Standards are the most critical standards that students are held accountable for mastering. They are highly focused specific areas of instructional emphasis and are essential for student proficiency in the identified K-12 subject areas. Those standards that are not designated as Power Standards are intended to be embedded in instruction throughout the year. For more information regarding the curriculum you may access the District website at [www.ccsd.net/schools/curricOverviews.phtml](http://www.ccsd.net/schools/curricOverviews.phtml). Parents/guardians may use this information to assess their student's progress from course to course and year to year.

The district recognizes that parental/guardian guidance and encouragement in the development of a student's skills and knowledge are critical to the educational process. Understanding what will be required of your child as he/she progresses through the secondary grades towards earning a high school diploma will enable you to help your child reach this goal. It is our hope that the information contained in this document will be useful to parents/guardians as they continue to guide their children during these important years.

You are encouraged to contact your child's school staff and district staff should you have any questions regarding the contents of this booklet. You are commended for your hard work and unceasing efforts to ensure that your son/daughter is afforded the best educational experience possible.

**CLARK COUNTY SCHOOL DISTRICT  
STATEMENT OF NON-DISCRIMINATION**

The Clark County School District does not knowingly discriminate against any person on the basis of race, color, creed, religion, national or ethnic origin, sex, age, or disability in admission or access to, or treatment or participation in its programs and activities.

## 21<sup>ST</sup> CENTURY COURSE OF STUDY EXPECTATIONS

The Clark County School District is proud to announce the CCSD 21<sup>st</sup> Century Course of Study. In addition to the three years of mathematics and two years of science necessary to graduate with a high school standard diploma, students enrolling as freshmen in the fall of 2006 (graduating class of 2010) and each grade thereafter will be scheduled into a fourth year of mathematics, which will include Algebra II, and a third year of science, which will include Biology. The school district expects its students to be competitive in higher education and the workforce. Although the graduation requirements for a standard diploma will not change, we want our students to be prepared to take full advantage of what the world has to offer beyond high school.

The 21<sup>st</sup> Century Course of Study is in alignment with the new requirements of the Nevada Millennium Scholarship, which requires four years of mathematics, including Algebra II, and three years of science, two of which must be a lab science. The revised requirements for the Millennium Scholarship go into effect for current juniors, the graduating class of 2009.

<b>SUBJECT</b>	<b>CREDITS</b>
English	4
Mathematics (Includes Algebra II)	4
Science (Includes Biology)	3
World History	1
U.S. History	1
U.S. Government	1
Physical Education	2
Health Education	1/2
Use of Computers	1/2
Electives	5 1/2
<b>Total Credits</b>	<b>22 1/2</b>

All students will be expected to meet the requirements of the 21<sup>st</sup> Century Course of Study. Students must be prepared for the following post-secondary opportunities:

- University/Four-Year College
- Community/Two-Year College
- Trade/Technical School
- Workforce

This course of study will provide the following for students:

- Opens Doors to Workforce and Post-Secondary Educational Opportunities
- Meets Nevada System of Higher Education Core Requirements for Admission with the GPA requirement
- Prepares Students for the Revised Nevada State Millennium Scholarship Core Requirements

# CODE OF HONOR

## NEVADA DEPARTMENT OF EDUCATION

There is a clear expectation that all students will perform academic tasks with honor and integrity, with the support of parents, staff, faculty, administration, and the community. The learning process requires students to think, process, organize and create their own ideas. Throughout this process, students gain knowledge, self-respect, and ownership in the work that they do. These qualities provide a solid foundation for life skills, impacting people positively throughout their lives. Cheating and plagiarism violate the fundamental learning process and compromise personal integrity and one's honor. Students demonstrate academic honesty and integrity by not cheating, plagiarizing or using information unethically in any way.

### **WHAT IS CHEATING?**

Cheating or academic dishonesty can take many forms, but always involves the improper taking of information from and/or giving of information to another student, individual, or other source. Examples of cheating can include, but are not limited to:

- Taking or copying answers on an examination or any other assignment from another student or other source
- Giving answers on an examination or any other assignment to another student
- Copying assignments that are turned in as original work
- Collaborating on exams, assignments, papers, and/or projects without specific teacher permission
- Allowing others to do the research or writing for an assigned paper
- Using unauthorized electronic devices
- Falsifying data or lab results, including changing grades electronically

### **WHAT IS PLAGIARISM?**

Plagiarism is a common form of cheating or academic dishonesty in the school setting. It is representing another person's works or ideas as your own without giving credit to the proper source and submitting it for any purpose. Examples of plagiarism can include, but are not limited to:

- Submitting someone else's work, such as published sources in part or whole, as your own without giving credit to the source
- Turning in purchased papers or papers from the Internet written by someone else
- Representing another person's artistic or scholarly works such as musical compositions, computer programs, photographs, drawings, or paintings as your own
- Helping others plagiarize by giving them your work

All stakeholders have a responsibility in maintaining academic honesty. Educators must provide the tools and teach the concepts that afford students the knowledge to understand the characteristics of cheating and plagiarism. Parents must support their students in making good decisions relative to completing coursework assignments and taking exams. Students must produce work that is theirs alone, recognizing the importance of thinking for themselves and learning independently, when that is the nature of the assignment. Adhering to the Code of Honor for the purposes of academic honesty promotes an essential skill that goes beyond the school environment. Honesty and integrity are useful and valuable traits impacting one's life.

*Questions or concerns regarding the consequences associated with a violation of the Code of Honor may be directed towards your child's school administration and/or the school district.*

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## DIPLOMA OPTIONS

- **HONORS DIPLOMA - 22½ CREDITS**

If a student completes all of the Clark County School District and State of Nevada requirements, satisfies the twelve-credit minimum for Honors course work, accumulates a minimum weighted 3.50 Grade Point Average, and passes the Nevada State Proficiency Exams, he/she will receive an Honors Diploma.

- **ADVANCED DIPLOMA - 24 CREDITS**

A student may earn an Advanced Diploma by completing all of the Clark County School District and State of Nevada requirements, maintaining a 3.0 unweighted GPA, and passing the Nevada State Proficiency Exams. An additional science and social studies, arts and humanities or occupational education elective are required.

- Students in the class of 2009 and beyond must earn 4.0 mathematics units and a 3.25 unweighted GPA.

- **STANDARD DIPLOMA - 22½ CREDITS**

If a student completes all of the Clark County School District and State of Nevada requirements and passes the proficiency tests, he/she will receive a Standard Diploma.

- **CERTIFICATE OF ATTENDANCE**

The Certificate of Attendance is issued to those students who meet all course requirements for graduation but do not pass one or more of the proficiency tests. If a student chooses to accept the Certificate of Attendance and walk with his/her class at graduation, he/she may still take the exam at a later time. The Certificate of Attendance may be exchanged for a diploma upon passing all of the proficiency tests.

## MATRICULATION - ACADEMIC LOAD REQUIREMENTS FOR STUDENTS

Matriculation to the next grade level is based on credits earned, not years in attendance. Students will be reclassified by the eighteenth day of the first semester.

Specifically:

**In order to be classified as a:**

Sophomore (10<sup>th</sup> grade)

Junior (11<sup>th</sup> grade)

Senior (12<sup>th</sup> grade)

**A student must earn a minimum of:**

5.0 credits

11.0 credits

16.5 credits

(14.5 Block Schedule)

Parents should expect to receive correspondence regarding their child's academic status each year. Parents should call their child's counselor if they have any questions about their grade level classification.

## DUPLICATE COURSE WORK — REPEATING COURSES

High school students may repeat a course in which they would like to improve their grade. Additional credit will not be granted; the higher grade will be recorded in the academic history and the lower grade replaced with a repeated course notation.

# RECOMMENDED COLLEGE PREP EDUCATIONAL PLAN

**What kind of work do I want to do after high school? I am interested in the following career cluster:**

- |  |  |
|--|--|
| <input type="checkbox"/> Arts/Humanities     | <input type="checkbox"/> Human Resources     |
| <input type="checkbox"/> Business/Management | <input type="checkbox"/> Natural Resources   |
| <input type="checkbox"/> Health Services     | <input type="checkbox"/> Technology/Industry |

*For more career information, visit you school's library and use the Nevada Career Information System (NCIS) at [www.nvcis.intocareers.org](http://www.nvcis.intocareers.org) (User name: ncis; Password: Nevada)*

**What is my goal for after graduation? My plans after high school may include the following:**

- |   |   |
|---|---|
| <input type="checkbox"/> Apprenticeship             | <input type="checkbox"/> Technical/Trade School       |
| <input type="checkbox"/> Community/Two-Year College | <input type="checkbox"/> University/Four-Year College |
| <input type="checkbox"/> Military Service           | <input type="checkbox"/> Work                         |

**What kind of classes do I need to take in high school to be prepared for my goal? I am interested in the following school pathway:**

- |  |   |
|--|---|
| <input type="checkbox"/> Trade/Technical/Work  | <input type="checkbox"/> College Prep   |
| <input type="checkbox"/> Advanced Diploma  | <input type="checkbox"/> Honors Diploma |
| <input type="checkbox"/> Meeting 21 <sup>st</sup> Century Course of Study Expectations |   |

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## Grade 9

- English I
- Algebra
- Lab Science
- Physical Education I
- Computers/Study Skills/Careers
- Health (Foreign Language Recommended)

## Grade 10

- English II
- Geometry
- Lab Science
- Physical Education II
- World History
- Elective (Foreign Language Recommended)

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## Grade 11

- English III/Literature
- Algebra II/Trigonometry
- Lab Science
- U.S. History
- Elective (Foreign Language Recommended)
- Elective

## Grade 12

- English IV/Literature
- Statistics AP
- Lab Science
- U.S. Government
- Elective
- Elective

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*In addition please complete the Clark County School District On-line Web-based Educational Plan at: <http://ccsd.net/schools/edulplan>.*

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# HONORS DIPLOMA

Students planning to apply to the universities with competitive admission requirements may pursue the CCSD Honors Diploma. The course work in honors, Advanced Placement (AP) or International Baccalaureate (IB) classes is more intensive and rigorous. To qualify for the Honors Diploma, a student must complete the following twelve minimum requirements in honors/AP/IB classes:

<b>MINIMUM REQUIRED AREA OF ACADEMIC STUDY</b>	
<b>Required/Elective Areas of Study</b>	<b>Units</b>
English Honors	3
Mathematics Honors	2
Science Honors	2
Social Studies Honors	2
*Foreign language Honors	1
Elective Honors	2
<b>TOTAL HONORS UNITS</b>	<b>12</b>

\* First year foreign language classes, fifth year classes, and external credit options (correspondence courses, credit-by-exam, community service, educational travel, and music equivalent) will not receive Honors credit. Students must accumulate a minimum weighted GPA of 3.500 to qualify for an Honors Diploma. Students enrolled in weighted Honors/AP/IB courses through this program may have a grade point average greater than 4.00.

## **WEIGHTED HONORS COURSE**

A weighted grade point factor for successful completion of Honors, Advanced Placement (AP), and International Baccalaureate (IB) courses will be added as follows:

Honors	.025
Advanced Placement (AP)	.050
International Baccalaureate (IB)	.050

The weighted GPA cap for the Honors Program for students who enroll in 9<sup>th</sup> grade during or after 2003-04 school year will be added as follows:

- The weighted GPA cap for the Honors Program is no more than twenty-eight semesters (14 classes) of Honors/AP/IB courses.
- Students will receive a weighted grade point factor of .050 for four semesters (2 classes) of AP and IB courses and will also receive a weighted grade point factor of .025 for twenty-four semesters (12 classes) of Honors courses.
- Students who choose to enroll in only Honors level courses will receive a weighted grade point factor of .025 points for twenty-eight semesters (14 classes) of Honors courses.
- The highest possible GPA under this system is 4.80.

## **ADVANTAGES OF THE HONORS PROGRAM**

- Most competitive colleges and universities consider not only student's grades, but also their academic background evidenced by courses listed on the transcript, letters of recommendation from teachers and counselors, and SAT I or ACT scores.
- Enrollment in the Honors Program will assist students in their preparation for college entrance exams.
- The weighted GPA is used when determining ranking in class.

***Students may take Honors courses even if they have not chosen to complete the requirements for the Honors Diploma.***

# HIGH SCHOOL GRADUATION REQUIREMENTS

For students who enroll in 9th grade during or after the 2003-04 School Year

**Class of 2008 and beyond**

The following subjects are needed to meet graduation requirements:

STANDARD DIPLOMA		ADVANCED DIPLOMA****	
Required/Elective Areas of Study	Units	Required/Elective Areas of Study	Units
U.S. Government	1	U.S. Government	1
U.S. History	1	U.S. History	1
World History	1	World History	1
English	4	Arts/Humanities/ Occupational Education	1
Health Education	1/2	English	4
*Mathematics	3	Health Education	1/2
**Physical Education	2	*Mathematics	3
Science	2	**Physical Education	2
***Use of Computers	1/2	Science	3
Electives	7 1/2	*** Use of Computers	1/2
<b>TOTAL</b>	<b>22 1/2</b>	Electives	7
		<b>TOTAL</b>	<b>24</b>
Student must achieve a minimum of a 3.00 unweighted GPA.			

\*Mathematics course units must include at least Algebra I or Algebra I H, or Applied Algebra I A and I B, or above.

\*\*A maximum of one credit for Physical Education II will be granted if a student participates outside of the school day in interscholastic athletics or on a drill team, marching band, dance group, or cheerleading squad.

\*\*\*One half (1/2) credit can be earned in middle school if the student has successfully completed a semester computer literacy course with a passing grade.

Students must pass the Nevada Proficiency Exam in math, reading and writing to receive a diploma from Nevada high schools.

Students in the class of 2010 must pass math, reading, writing, and science.

\*\*\*\*Students in the class of 2009 and beyond must earn 4.0 mathematics units and a 3.25 unweighted GPA.

## TESTING FOR COLLEGE

All Clark County School District students will take the PSAT at no cost during the sophomore year to provide data that will assist in determining the student's potential success in Advanced Placement (AP) courses. Taking the PSAT in the sophomore year also prepares the student for the SAT. The PSAT taken as a junior (at the cost of the student) is used to identify National Merit Scholarship Semi-finalists. Students planning to attend college may also prepare for the ACT entrance exam by taking the PLAN test during his/her sophomore year which is available at selected schools. The final stage of pre-college testing involves taking the ACT, [www.actstudent.org](http://www.actstudent.org), and/or SAT, [www.collegeboard.com](http://www.collegeboard.com), in the spring of the student's junior year, as most four-year colleges/universities require either test for admission. In addition, some colleges/universities require a minimum score on the SAT and/or ACT to determine placement in freshman English and math courses. Finally, some universities determine scholarship eligibility on ACT and/or SAT results.

Note: It may be necessary to retake the ACT and/or SAT to increase the student's score. This may enable a student to avoid placement in a remedial math and/or English college course.

Remedial courses at Nevada State colleges/universities provide no college credit and are not paid for by the Millennium Scholarship program.

# NEVADA STATE CONTENT STANDARDS INTRODUCTION

The 1999/00 school year saw the implementation of Nevada State Content and Performance Standards in English/language arts, mathematics, and science. The 2000/01 school year saw the addition of social studies, the arts, physical education/health, and computer and technology education. For the purposes of the Curriculum Overview, only the core academic curricular state standards are provided. These standards fulfill promises made by the Nevada Legislature to establish high expectations for all of Nevada's children. The standards identify what all Nevada students should know and be able to do from kindergarten through twelfth grade. The pages that follow outline the academic standards in English/language arts, mathematics, science, and social studies. Each secondary course profiled in this booklet will cover or address a variety of the state content standards. To ensure that all students are provided the opportunity to learn all of the identified content standards, recommended course sequences in each content area either have been or will be developed to guide students as they progress from grades six through twelve. These opportunities to learn are critical as students prepare to take the Nevada High School Proficiency Examinations beginning in the fall of their junior year. The class of 2005 will be the first class to participate in a standards-based proficiency examination program in writing, reading, mathematics, and science. While high academic standards for all of our students will help improve teaching and learning in our schools, parents/guardians also play a major role in the education of their children. By encouraging your child to develop his or her skills and knowledge, you will be sending the message that a good education is important to his/her future. Parents/guardians wishing more details regarding Nevada State Content and Performance Standards may contact their child's school.

# NEVADA STATE CONTENT STANDARDS

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*Standards identify what students should learn by the end of twelfth grade.*

## ENGLISH/LANGUAGE ARTS

1. Students know and use word analysis skills and strategies to comprehend new words encountered in text.
2. Students use reading process skills and strategies to build comprehension.
3. Students read to comprehend, interpret, and evaluate literature from a variety of authors, cultures, and times.
4. Students read to comprehend, interpret, and evaluate informational texts for specific purposes.
5. Students write a variety of texts that inform, persuade, describe, evaluate, or tell a story and are appropriate to purpose and audience.
6. Students write with a clear focus and logical development, evaluating, revising, and editing for organization, style, tone, and word choice.
7. Students write using standard English grammar, usage, punctuation, capitalization, and spelling.
8. Students listen to and evaluate oral communications for content, style, speaker's purpose, and audience appropriateness.
9. Students speak using organization, style, tone, voice, and media aids appropriate to audience and purpose.
10. Students participate in discussions to offer information, clarify ideas, and support a position.
11. Students formulate research questions, use a variety of sources to obtain information, weigh the evidence, draw valid conclusions, and present findings.

## MATHEMATICS

1. **Numbers, Number Sense, and Computation:** Students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.
2. **Patterns, Functions, and Algebra:** Students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.
3. **Measurement:** Students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.
4. **Spatial Relationships, Geometry, and Logic:** Students will identify, represent, verify, and apply spatial relationships and geometric properties to solve problems, communicate, and make connections within and beyond the field of mathematics.
5. **Data Analysis:** Students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

# NEVADA STATE CONTENT STANDARDS \_\_\_\_\_

## **MATHEMATICS (CONT.)**

### **Nevada Process Standards**

- A. **Problem Solving:** Students will develop their ability to solve problems by engaging in developmentally appropriate opportunities where there is a need to use various approaches to investigate and understand mathematical concepts,
- B. **Mathematical Communication:** Students will develop their ability to communicate mathematically by solving problems where there is a need to obtain information from the real world through reading, listening, and observing.
- C. **Mathematical Reasoning:** Students will develop their ability to reason mathematically by solving problems where there is a need to investigate mathematical ideas and construct their own learning in all content areas.
- D. **Mathematical Connections:** Students will develop the ability to make mathematical connections by solving problems where there is a need to view mathematics as an integrated whole.

## **SCIENCE**

### *Nature and History of Science*

- 1. Students understand that a variety of communication methods can be used to share scientific information.
- 2. Students understand the impacts of science and technology in terms of costs and benefits to society.

### *Physical Science*

- 1. Students understand that atomic structure explains the properties and behavior of matter.
- 2. Students understand the interactions between force and motion.
- 3. Students understand that there are interactions between matter and energy.

### *Earth and Space Science*

- 1. Students understand heat and energy transfer in and out of the atmosphere and influence weather and climate.
- 2. Students know scientific theories of origins and evolution of the universe.
- 3. Students understand evidence for processes that take place on a geologic time scale.

### *Life Science*

- 1. Students understand how genetic information is passed from one generation to another.
- 2. Students understand that all life forms, at all levels of organization, use specialized structure and similar processes to meet life's needs.
- 3. Students understand that ecosystems display patterns of organization, change, and stability as a result of the interactions and interdependencies among the living and non-living components of the Earth.
- 4. Students understand biological evolution and diversity of life.

# NEVADA STATE CONTENT STANDARDS

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## SOCIAL STUDIES

### *Civics*

1. **Rules and Law** - Students know why society needs rules, laws, and governments.
2. **The U.S. Government** - Students know the United States Constitution and the government it creates.
3. **National and State Government** - Students can explain the relationship between the states and national government.
4. **The Political Process** - Students describe the roles of political parties, interest groups, and public opinion in the democratic process.
5. **Citizenship** - Students know the roles, rights, and responsibilities of United States citizens and the symbols of our country.
6. **State and Local Government** - Students know the structure and functions of state and local governments.
7. **Political and Economic Systems** - Students explain the different political and economic systems in the world.
8. **International Relations** - Students know the political and economic relationship of the United States and its citizens to other nations.

## ECONOMICS

1. **The Economic Way of Thinking** - Students will use fundamental economic concepts, including scarcity, choice, cost, incentives, and costs versus benefits to describe and analyze problems and opportunities, both individual and social.
2. **Measuring U.S. Economic Performance** - Students will demonstrate a knowledge of past and present U.S. economic performance, identify the economic indicators used to measure that performance, and use this knowledge to make individual decisions and discuss social issues.
3. **Functioning of Markets** - Students will demonstrate an understanding of how markets work, including an understanding of why markets form, how supply and demand interact to determine market prices and interest rates, and how changes in prices act as signals to coordinate trade.
4. **Private U.S. Economic Institutions** - Students will describe the roles played by various U.S. economic institutions, including financial institutions, labor unions, for-profit business organizations, and not-for-profit organizations.
5. **Money** - Students demonstrate an understanding of various forms of money; how money makes it easier to trade, borrow, save, invest, and compare the value of goods and services; and how the Federal Reserve System and its policies affect the U.S. money supply.
6. **The U.S. Economy as a Whole** - Students will demonstrate an understanding of the U.S. economic system as a whole in terms of how it allocates resources; determines the nation's production, income, unemployment, and price levels; and leads to variations in individual income levels.
7. **An Evolving Economy** - Students will demonstrate an understanding of how investment, entrepreneurship, competition, and specialization lead to changes in an economy's structure and performance.

# NEVADA STATE CONTENT STANDARDS \_\_\_\_\_

## **ECONOMICS (CONT.)**

8. **The Role of Government in a Market Economy** - Students will explain the role of government in a market economy.
9. **The International Economy** - Students explore the characteristics of non-U.S. economic systems in order to demonstrate an understanding of how they are connected, through trade, to peoples and cultures throughout the world.

## **GEOGRAPHY**

1. **The World in Spatial Terms** - Students use maps, globes, and other geographic tools and technologies to locate and derive information about people, places, and environments.
2. **Places and Regions** - Students understand the physical and human features and cultural characteristics of places and use this information to define and study regions and their patterns of change.
3. **Physical Systems** - Students understand how physical processes shape Earth's surface patterns and ecosystems.
4. **Human Systems** - Students understand how economic, political, and cultural processes interact to shape patterns of human migration and settlement, influence and interdependence, and conflict and cooperation.
5. **Environment and Society** - Students understand the effects of interactions between human and physical systems and the changes in use, distribution, and importance of resources.
6. **Geographic Applications** - Students apply geographic knowledge of people, places, and environments to interpret the past, understand the present, and plan for the future.
7. **Geographic Skills** - Students ask and answer geographic questions by acquiring, organizing, and analyzing geographic information.

## **HISTORY**

1. **Chronology** - Students use chronology to organize and understand the sequence and relationship of events.
2. **History Skills** - Students will use social studies vocabulary and concepts to engage in inquiry, in research, in analysis, and in decision making.
3. **Prehistory to 400 CE** - Students understand the development of human societies, civilizations, and empires through 400 CE.
4. **1 CE to 1400** - Students understand the characteristics, ideas, and significance of civilizations and religions from 1 CE to 1400.
5. **1200 to 1750** - Students understand the impact of the interaction of peoples, cultures, and ideas from 1200 to 1750.
6. **1700 to 1865** - Students understand the people, events, ideas, and conflicts that led to the creation of new nations and distinctive cultures.
7. **1860 to 1920** - Students understand the importance and impact of political, economic, and social ideas.

# NEVADA STATE CONTENT STANDARDS \_\_\_\_\_

## **HISTORY (CONT.)**

8. **The Twentieth Century, a Changing World: 1920 to 1945** - Students understand the importance and effect of political, economic, technological, and social changes in the world from 1920 to 1945.
9. **The Twentieth Century, a Changing World: 1945 to 1990** - Students understand the shift of international relationships and power as well as the significant developments in American culture.
10. **New Challenges, 1990 to the Present** - Students understand the political, economic, social, and technological issues challenging the world as it approaches and enters the new millennium.

# GUIDANCE AND COUNSELING PROGRAM AT THE HIGH SCHOOL LEVEL

All schools offer a comprehensive guidance and counseling program which is integrated with the high school curriculum. Counselors are professionally trained in the academic, personal/social, and career development of high school students.

High school guidance counselors assist students with:

- Educational planning
- Interpretation of test scores
- Career information
- In-state post secondary institutions
- Social/emotional growth

Each school has a designated college counselor who can assist students with scholarship information and out-of-state post secondary institutions.

## PLANNING RESOURCES PROMOTE STUDENT SUCCESS

Several planning resources are made available to students and parents to help young people transition successfully to high school and to their post-secondary endeavors.

- **CCSD Guidance and Counseling website** – The Guidance and Counseling Web site is designed to provide students and parents with information on counseling services provided by the school district. It also serves as a support reference for preparing students for their future educational decisions regarding Post-Secondary Planning. Starting with elementary school, parents and students are able to review a checklist of activities on “How to Support your Child’s Education”. These activities will assist with school success and will also prepare children for college, apprenticeships, trade and technical schools, military opportunities, or for going directly to work. Current scholarships and college event for students are also updated weekly on the website. For details visit: [www.ccsd.net/cpd](http://www.ccsd.net/cpd), select Guidance and Counseling from the menu for the information.
- **Graduate Profile Transitional Planning Guide** – Each spring, eighth graders receive this guide to help them prepare for high school and start thinking about post-secondary educational and career choices.
- **College Planning and Scholarship Handbook** – This guide is provided to all juniors and seniors to review information about graduation requirements and career planning, and to introduce educational and military options, trade and technical schools, and scholarship tips. The guide also provides extensive information about where to find private, local, state and national scholarship resources, how to apply for scholarships and general information about Nevada’s Millennium Scholarship.
- **Nevada’s Millennium Scholarship Program** – The State of Nevada’s Millennium Scholarship Program provides financial support to Nevada’s high school graduates who plan to attend an eligible Nevada community college, state college, or university. You may receive up to a maximum award of \$10,000 for undergraduate coursework during the six years following your high school graduation. There is no application form to complete. If you meet all Millennium Scholarship requirements upon high school graduation, the district will submit your name at the end of June to the Office of the State Treasurer. You will receive an award notification in July. Policy guidelines and requirements for eligibility can be obtained by call 1-888-477-2667 or at [nevadatreasurer.gov](http://nevadatreasurer.gov). Please note that this information is subject to any changes in state law, policies adopted by the NSHE Board of Regents, availability of funding, and any related matters hereto.

*For more information about these and related resources, contact your school’s guidance department.*

# ENGLISH I

## NINTH GRADE

This course emphasizes the study of language and composition and focuses on the skills of critical thinking, listening, speaking, writing, and research. Literature serves as a model for writing and critical thinking.

### WORD ANALYSIS

- ⊙ apply knowledge of prefixes, suffixes, and roots to determine word meaning
- ⊙ use context clues to determine word meaning
- differentiate between abstract and concrete nouns
- use synonyms, antonyms, and homonyms appropriately in speaking and writing
- differentiate between denotation and connotation
- ⊙ apply knowledge of syntax and literary allusions
- ⊙ analyze figurative language

### THE READING PROCESS

- apply reading process skills and strategies to aid comprehension
- ⊙ understand stated information and identify the literal meaning of words or phrases
- ⊙ draw conclusions or inferences

### GRAMMAR, USAGE, AND MECHANICS

- ⊙ write using standard English grammar, usage, and mechanics
- ⊙ recognize all correct punctuation and capitalization
- ⊙ construct various types of sentences
- ⊙ correct sentence errors
- ⊙ recognize misspelled words

### COMPOSITION/WRITING PROCESS

- ⊙ apply the five stages of the writing process
- apply the holistic rubric of the Nevada State Proficiency Exam in Writing
- apply the skills required by the Nevada State Proficiency Exam in writing compositions
- write various forms of business communication
- write a variety of compositions appropriate to audience and purpose
- ⊙ write expository, persuasive, narrative, and descriptive compositions
- demonstrate unity and coherence in writing
- ⊙ write with clarity and express ideas concisely
- ⊙ paraphrase and summarize passages
- ⊙ write a research paper citing sources according to a given format

### LITERATURE/INFORMATIONAL TEXT

- read and respond to a broad range of contemporary and classic literature
- ⊙ analyze the elements of fiction
- ⊙ recognize and interpret poetic and literary devices

## ***ENGLISH I NINTH GRADE (Continued)***

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- ⊙ recognize argumentative techniques
- ⊙ identify author's purpose or viewpoint
- ⊙ analyze use of text features and rhetorical strategies
- ⊙ synthesize multiple primary and secondary sources to support positions
- ⊙ read and follow multi-step directions
- ⊙ differentiate between fact and opinion

### **COMMUNICATION/STUDY SKILLS**

- ⊙ apply standard English to communicate
  - employ appropriate and effective speaking techniques
  - practice effective listening skills
  - coherently and concisely defend responses and opinions
  - employ constructive feedback using given criteria
  - participate as a member of a team to solve problems and find solutions
- ⊙ read aloud or recite literary, dramatic, and original works
- ⊙ summarize and evaluate communications that inform, persuade, and entertain
  - practice effective study habits
  - maintain an organized notebook and record of assignments
  - follow directions accurately
  - take organized notes from lectures, texts, and various media
  - practice effective test-taking strategies

### **RESEARCH SKILLS**

- ⊙ formulate research questions and use a research design to gather information
- ⊙ evaluate possible sources of information for credibility and usefulness
- ⊙ cite sources of information using a standard form of documentation

# ENGLISH II TENTH GRADE

This continuation of English I stresses the study of language, literature, and composition. The skills of reading, writing, listening, speaking, research, literary analysis, and critical thinking will be further developed.

## **WORD ANALYSIS**

- ⊙ apply knowledge of prefixes, suffixes, and roots to determine word meaning
- ⊙ use context clues to determine word meaning
- ⊙ analyze figurative language

## **THE READING PROCESS**

- apply reading process skills and strategies to aid comprehension
- ⊙ determine the main idea of various types of text
- adjust reading rate and strategies appropriate to text and purpose
- ⊙ draw conclusions and make inferences based on evidence from text
- ⊙ understand stated information and identify the literal meaning of words or phrases

## **GRAMMAR, USAGE, AND MECHANICS**

- ⊙ write using standard English grammar, usage, and mechanics
- ⊙ construct various types of sentences
  - correct sentence errors
- ⊙ write using effective transitions
  - appropriately use active and passive voice in writing

## **COMPOSITION/WRITING PROCESS**

- ⊙ apply the five stages of the writing process
- apply the holistic rubric of the Nevada State Proficiency Exam in Writing
- ⊙ write with clarity and express ideas concisely
- write various forms of business communication
- write a variety of compositions appropriate to audience and purpose
- ⊙ write expository, persuasive, narrative, and descriptive compositions
- paraphrase information accurately
- ⊙ write a research paper citing sources according to a given format

## **LITERATURE/INFORMATIONAL TEXT**

- read and respond to a broad range of classic and contemporary literature
- ⊙ analyze literary elements of various types of literature
- ⊙ recognize and interpret poetic and literary devices
- ⊙ identify author's purpose or viewpoint
- ⊙ analyze use of text features and rhetorical strategies
- ⊙ read and follow multi-step directions

## ***ENGLISH II TENTH GRADE (Continued)***

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- ⊙ identify the main idea and supporting details
- ⊙ differentiate between fact and opinion
- ⊙ summarize and synthesize information from primary and secondary sources

### **COMMUNICATION/STUDY SKILLS**

- ⊙ apply standard English to communicate
  - employ appropriate speaking techniques
- ⊙ justify a position, using logic and refuting opposing viewpoints
  - employ constructive feedback using given criteria
  - practice effective listening skills
  - solve problems and find solutions as a member of a team
- ⊙ recite literary, dramatic, and original works
- ⊙ summarize communications that inform, persuade, and entertain
  - practice effective study habits
  - practice effective test-taking strategies

### **RESEARCH SKILLS**

- ⊙ formulate research questions
- ⊙ use a research design to gather information
- ⊙ evaluate possible sources for credibility and usefulness
- ⊙ cite sources using a standard form of documentation

# ENGLISH III

## ELEVENTH GRADE

This course continues to emphasize writing skills. A variety of literature is studied as a basis for critical analysis and composition. Listening, speaking, reading, and research skills are expanded.

### WORD ANALYSIS

- ⊙ apply knowledge of word parts to determine word meaning
- ⊙ use context clues to determine word meaning
- ⊙ apply knowledge of syntax and analyze literary allusions
- ⊙ analyze figurative language

### THE READING PROCESS

- ⊙ apply reading process skills and strategies
  - use a variety of strategies to repair comprehension
- ⊙ determine main ideas in various types of text
- ⊙ make inferences based on evidence from text

### GRAMMAR, USAGE, AND MECHANICS

- ⊙ demonstrate conventional spelling
- ⊙ write using standard English grammar, usage, and mechanics
  - write effective sentences
  - use active voice appropriately in writing

### COMPOSITION/WRITING PROCESS

- ⊙ apply the five stages of the writing process
  - apply the skills required by the Nevada State Proficiency Exam in Writing
- ⊙ write with clarity and express ideas concisely
- write various forms of business communication appropriate to purpose and audience
- write a variety of compositions that support a thesis statement with relevant details
- write using appropriate transitions
- demonstrate unity and coherence in writing
- ⊙ write persuasive, expository, narrative, and descriptive compositions
  - accurately paraphrase information
- ⊙ write a research paper citing sources according to a given format

### LITERATURE/INFORMATIONAL TEXT

- read and analyze a broad range of classic and contemporary literature
- ⊙ analyze literary elements of various types of literature
- ⊙ recognize and interpret poetic and literary devices
- identify author's purpose or viewpoint
- ⊙ analyze the use of text features and rhetorical strategies in primary source documents
- ⊙ synthesize multiple primary and secondary sources to support positions

## ***ENGLISH III ELEVENTH GRADE (Continued)***

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- ⊙ critique the power, logic, and appeal of arguments advanced in texts
- distinguish between fact and opinion

### **COMMUNICATION/STUDY SKILLS**

- ⊙ apply standard English to communicate
- apply appropriate speaking and listening techniques in a variety of formal and informal speaking situations
- ⊙ justify a position using logic and refuting opposing viewpoints
- employ given criteria to give constructive feedback
- ⊙ participate in discussion by identifying, synthesizing, and evaluating data
- create a multi-media presentation based on research
- take organized notes from lecture, text, and various media
- apply effective test-taking strategies

### **RESEARCH SKILLS**

- ⊙ formulate research questions
- ⊙ use a research design to gather information
- ⊙ evaluate sources for credibility and usefulness
- ⊙ cite sources using a standard form of documentation

# ENGLISH IV TWELFTH GRADE

This course perfects written and oral communication skills that students will need as adults. Emphasis is placed on effective writing and analytical thinking. A variety of literature and media is used as the basis for composition and discussion.

## **WORD ANALYSIS**

- ⊙ apply knowledge of word parts to determine word meaning
- ⊙ use context clues to determine word meaning
- ⊙ apply knowledge of syntax and analyze literary allusions
- ⊙ analyze figurative language

## **THE READING PROCESS**

- ⊙ apply reading process skills and strategies
- ⊙ evaluate main ideas and supporting details
- ⊙ make inferences and draw conclusions based on textual evidence
- ⊙ make predictions
  - interpret non-literal language

## **GRAMMAR, USAGE, AND MECHANICS**

- ⊙ write using standard English grammar, usage, and mechanics
- ⊙ use rules of capitalization
- ⊙ use varied sentence structure in writing for stylistic effect
- ⊙ use effective transitions in writing

## **COMPOSITION/WRITING PROCESS**

- ⊙ apply the five stages of the writing process
- ⊙ write with clarity and express ideas concisely
- ⊙ write various forms of technical and business communication
  - write various forms of personal communication
  - write for a variety of purposes and audiences
  - write compositions that support a thesis with relevant details
- ⊙ write persuasive, expository, narrative, and descriptive compositions
- ⊙ paraphrase, summarize, and synthesize information in writing
- ⊙ write a research paper citing sources according to a given format

## **LITERATURE/INFORMATIONAL TEXT**

- ⊙ read and analyze contemporary and classic fiction, nonfiction, drama, and poetry
- ⊙ analyze the elements of various types of literature
- ⊙ recognize and interpret poetic and literary devices
- ⊙ identify author's purpose or viewpoint
- ⊙ analyze the use of text features and rhetorical strategies in primary source documents
- ⊙ synthesize multiple primary and secondary sources to support positions

## ***ENGLISH IV TWELFTH GRADE (Continued)***

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- distinguish between fact and opinion

### **COMMUNICATION/STUDY SKILLS**

- apply standard English to communicate
- apply appropriate speaking and listening techniques in a variety of formal and informal speaking situations
- ⊙ justify a position using logic and refuting opposing viewpoints
- design and apply criteria for giving constructive feedback
- ⊙ participate in discussion by identifying, synthesizing, and evaluating data
- apply effective reading strategies, study habits, and test-taking skills
- take organized notes from lectures, texts, and various media
- ⊙ summarize and evaluate communications that inform, persuade, and entertain

### **RESEARCH SKILLS**

- ⊙ formulate research questions
- ⊙ use a research design to gather information
- ⊙ evaluate sources for credibility and usefulness
- ⊙ cite sources using a standard form of documentation

# APPLIED ALGEBRA IA

Applied Algebra IA is the first course in a two-year algebra sequence. It is intended to increase mathematical fluency in problem solving, logic, reasoning, and effective communication in the study of patterns, functions, and algebra. This course builds on the concepts of rational and irrational numbers, data analysis, probability, geometry, measurement, spatial relationship, patterns, and algebraic concepts. The use of technology, including calculators and computer software, is an integral part of this course. Students will participate in hands-on activities to develop a deeper understanding of algebraic concepts.

## PREPARATION FOR HIGH-STAKES EXAMINATIONS

It is expected students will:

- review previous-grade topics while preparing for the Nevada High School Proficiency Examination in Mathematics

## REAL NUMBER SYSTEM

It is expected students will:

- ⊙ apply properties of the real number system
- ⊙ solve problems using real numbers
- ⊙ solve problems using matrix arithmetic
- ⊙ evaluate formulas and algebraic expressions using multiple strategies

## FUNCTIONS, EQUATIONS, AND INEQUALITIES

It is expected students will:

- ⊙ solve problems integrating coordinate geometry and algebra
- ⊙ determine solutions for multiple-step linear equations and inequalities involving real numbers
- ⊙ describe and explore relations and functions, including notation, domain, and range
- ⊙ graph and solve linear equations and inequalities
- ⊙ graph and solve absolute value equations and inequalities

## DATA ANALYSIS AND PROBABILITY

It is expected students will:

- ⊙ organize statistical data in tables, graphs, and matrices
- determine the probability of chance events

## PROBLEM SOLVING:

It is expected students will:

- ⊙ generalize solutions and apply previous knowledge to new problem solving situations
- ⊙ determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem
- ⊙ apply problem solving strategies until a solution is found or it is clear that no solution exists
- ⊙ interpret and solve a variety of mathematical problems by paraphrasing
- ⊙ identify necessary and extraneous information
- ⊙ check the reasonableness of a solution
- ⊙ apply technology as a tool in problem solving situations

## ***APPLIED ALGEBRA IA (Continued)***

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- ⊙ apply combinations of proven strategies and previous knowledge to solve non-routine problems

### **MATHEMATICAL COMMUNICATION:**

It is expected students will:

- ⊙ use a variety of techniques to solve mathematical problems
- ⊙ evaluate written and oral presentations in mathematics
- ⊙ model and explain mathematical relationships using oral, written, graphic, and algebraic methods
- ⊙ communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving
- ⊙ use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language

### **MATHEMATICAL REASONING:**

It is expected students will:

- ⊙ recognize and apply deductive and inductive reasoning
- ⊙ review and refine the assumptions and steps used to derive conclusions in mathematical arguments
- ⊙ make and test conjectures about algebraic and geometric properties based on mathematical properties
- ⊙ justify the validity of an argument
- ⊙ construct a valid argument

### **MATHEMATICAL CONNECTIONS:**

It is expected students will:

- ⊙ use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- ⊙ explain the relationships between concepts and procedures
- ⊙ use the connections among mathematical topics to develop multiple approaches to problems
- ⊙ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- ⊙ identify, explain, and apply mathematics in everyday life

# APPLIED ALGEBRA IB

Applied Algebra IB is the second course in a two-year algebra sequence. This one-year course is designed for students who have completed Applied Algebra IA. It is intended to increase mathematical fluency in problem solving, logic, reasoning, and effective communication in the study of patterns, functions, and algebra. This course builds on the concepts of rational and irrational numbers, data analysis, probability, geometry, measurement, spatial relationship, patterns, and algebraic concepts. The use of technology, including calculators and computer software, is an integral part of this course. Students will participate in hands-on activities to develop a deeper understanding of algebraic concepts.

## PREPARATION FOR HIGH-STAKES EXAMINATIONS

It is expected students will:

- review previous-grade topics while preparing for the Nevada High School Proficiency Examination in Mathematics

## REAL NUMBER SYSTEM

It is expected students will:

- ⊙ solve problems using real numbers
- ⊙ apply properties of the real number system including exponents, radicals, and scientific notation
- ⊙ evaluate formulas and algebraic expressions, including rational expressions, using multiple strategies

## FUNCTIONS, EQUATIONS, AND INEQUALITIES

It is expected students will:

- ⊙ solve problems integrating coordinate geometry and algebra
- ⊙ graph and solve linear and quadratic equations and inequalities involving real numbers, using a variety of methods
- ⊙ graph and solve systems of linear and non-linear equations and inequalities, with and without technology
- ⊙ perform operations on polynomials, including factoring
- ⊙ solve problems involving the domain and range of functions and relations

## DATA ANALYSIS AND PROBABILITY

It is expected students will:

- apply permutations and combinations to mathematical and practical situations, including the Fundamental Counting Principle

## PROBLEM SOLVING

It is expected students will:

- ⊙ generalize solutions and apply previous knowledge to new problem solving situations
- ⊙ determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem

## ***APPLIED ALGEBRA IB (Continued)***

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- ⊙ apply problem solving strategies until a solution is found or it is clear that no solution exists
- ⊙ interpret and solve a variety of mathematical problems by paraphrasing
- ⊙ identify necessary and extraneous information
- ⊙ check the reasonableness of a solution
- ⊙ apply technology as a tool in problem solving situations
- ⊙ apply combinations of proven strategies and previous knowledge to solve non-routine problems

### **MATHEMATICAL COMMUNICATION**

It is expected students will:

- ⊙ use a variety of techniques to solve mathematical problems
- ⊙ evaluate written and oral presentations in mathematics
- ⊙ model and explain mathematical relationships using oral, written, graphic, and algebraic methods
- ⊙ communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving
- ⊙ use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language

### **MATHEMATICAL REASONING:**

It is expected students will:

- ⊙ recognize and apply deductive and inductive reasoning
- ⊙ review and refine the assumptions and steps used to derive conclusions in mathematical arguments
- ⊙ make and test conjectures about algebraic and geometric properties based on mathematical properties
- ⊙ justify the validity of an argument
- ⊙ construct a valid argument

### **MATHEMATICAL CONNECTIONS:**

It is expected students will:

- ⊙ use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- ⊙ explain the relationships between concepts and procedures
- ⊙ use the connections among mathematical topics to develop multiple approaches to problems
- ⊙ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- ⊙ identify, explain, and apply mathematics in everyday life

# ALGEBRA I

This one-year course is designed to provide students with the necessary knowledge and skills to be prepared for further studies in mathematics. It is intended to increase mathematical fluency in problem solving, logic, reasoning, and effective communication in the study of patterns, functions, and algebra. This course builds on the concepts of rational and irrational numbers, data analysis, probability, geometry, measurement, spatial relationships, patterns, and algebraic concepts. The use of technology, including calculators and computer software, is an integral part of this course.

## PREPARATION FOR HIGH-STAKES EXAMINATIONS

It is expected students will:

- review previous-grade topics while preparing for the Nevada High School Proficiency Examination in Mathematics

## REAL NUMBER SYSTEM

It is expected students will:

- ⊙ evaluate formulas and algebraic expressions using multiple strategies
- ⊙ solve problems using real numbers
- ⊙ apply properties of the real number system including exponents, radicals, and scientific notation
- ⊙ solve problems using matrix arithmetic
- ⊙ evaluate formulas and algebraic expressions, including rational expressions, using multiple strategies

## FUNCTIONS, EQUATIONS, AND INEQUALITIES

It is expected students will:

- ⊙ solve problems integrating coordinate geometry and algebra
- ⊙ determine solutions for multiple-step linear equations and inequalities involving real numbers
- ⊙ graph and solve linear equations and inequalities
- ⊙ graph and solve absolute value equations and inequalities
- ⊙ graph and solve quadratic equations and inequalities involving real numbers
- ⊙ graph and solve systems of linear and non-linear equations and inequalities, with and without technology
- ⊙ perform operations on polynomials, including factoring
- ⊙ solve problems involving the domain and range of functions and relations

## DATA ANALYSIS AND PROBABILITY

It is expected students will:

- ⊙ organize statistical data in tables, graphs, and matrices
  - determine the probability of chance events
  - apply permutations and combinations to mathematical and practical situations, including the Fundamental Counting Principle

## PROBLEM SOLVING:

It is expected students will:

- ⊙ generalize solutions and apply previous knowledge to new problem solving situations

## ***ALGEBRA I (Continued)***

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- ⊙ determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem
- ⊙ apply problem solving strategies until a solution is found or it is clear that no solution exists.
- ⊙ interpret and solve a variety of mathematical problems by paraphrasing
- ⊙ identify necessary and extraneous information
- ⊙ check the reasonableness of a solution
- ⊙ apply technology as a tool in problem solving situations
- ⊙ apply combinations of proven strategies and previous knowledge to solve non-routine problems

### **MATHEMATICAL COMMUNICATION:**

It is expected students will:

- ⊙ use a variety of techniques to solve mathematical problems
- ⊙ evaluate written and oral presentations in mathematics
- ⊙ model and explain mathematical relationships using oral, written, graphic, and algebraic methods
- ⊙ communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving
- ⊙ use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language

### **MATHEMATICAL REASONING:**

It is expected students will:

- ⊙ recognize and apply deductive and inductive reasoning
- ⊙ review and refine the assumptions and steps used to derive conclusions in mathematical arguments
- ⊙ make and test conjectures about algebraic and geometric properties based on mathematical properties
- ⊙ justify the validity of an argument
- ⊙ construct a valid argument

### **MATHEMATICAL CONNECTIONS:**

It is expected students will:

- ⊙ use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- ⊙ explain the relationships between concepts and procedures
- ⊙ use the connections among mathematical topics to develop multiple approaches to problems
- ⊙ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- ⊙ identify, explain, and apply mathematics in everyday life

# GEOMETRY

This one-year course is a logical development of the inductive and deductive systems of reasoning. Emphasis is on developing visualization abilities, analytical skills, and logical reasoning. Continual development and review of algebraic skills are an integral part of this course. Various instructional techniques are utilized through activity-based methods. The use of manipulatives, mathematical tools, and technology, including calculators and computer software, is an integral part of this course.

## PREPARATION FOR HIGH-STAKES EXAMINATIONS

It is expected students will:

- maintain algebra and arithmetic skills while preparing for the Nevada High School Proficiency Examination in Mathematics

## PLANE AND SOLID GEOMETRY

It is expected students will:

- ⊙ solve problems involving points, lines, planes, and angles
- ⊙ represent and solve problems using coordinate geometry
- ⊙ solve real-world problems using properties of congruence, similarity, and symmetry
- ⊙ solve real-world problems involving properties of polygons and circles, including the Pythagorean Theorem
- ⊙ develop strategies for computing the area, perimeter, volume, and surface area of objects
- ⊙ solve real-world problems involving plane figures and three-dimensional objects
- ⊙ represent and solve problems using transformations and tessellations

## REASONING AND LOGIC

It is expected students will:

- ⊙ solve problems using the rules of logic
- ⊙ solve problems and justify solutions using geometric models and tools
- ⊙ solve problems and justify solutions using geometric constructions
- ⊙ design proofs using deductive and inductive methods, including indirect, paragraph, and two-column formats

## PROBLEM SOLVING

It is expected students will:

- ⊙ generalize solutions and apply previous knowledge to new problem solving situations
- ⊙ determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem
- ⊙ apply problem solving strategies until a solution is found or it is clear that no solution exists.
- ⊙ interpret and solve a variety of mathematical problems by paraphrasing
- ⊙ identify necessary and extraneous information
- ⊙ check the reasonableness of a solution
- ⊙ apply technology as a tool in problem solving situations
- ⊙ apply combinations of proven strategies and previous knowledge to solve non-routine problems

## ***GEOMETRY (Continued)***

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### **MATHEMATICAL COMMUNICATION**

It is expected students will:

- ⦿ use a variety of techniques to solve mathematical problems
- ⦿ evaluate written and oral presentations in mathematics
- ⦿ model and explain mathematical relationships using oral, written, graphic, and algebraic methods
- ⦿ communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving
- ⦿ use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language

### **MATHEMATICAL REASONING**

It is expected students will:

- ⦿ recognize and apply deductive and inductive reasoning
- ⦿ review and refine the assumptions and steps used to derive conclusions in mathematical arguments
- ⦿ make and test conjectures about algebraic and geometric properties based on mathematical properties
- ⦿ justify the validity of an argument
- ⦿ construct a valid argument

### **MATHEMATICAL CONNECTIONS**

It is expected students will:

- ⦿ use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- ⦿ explain the relationships between concepts and procedures
- ⦿ use the connections among mathematical topics to develop multiple approaches to problems
- ⦿ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- ⦿ identify, explain, and apply mathematics in everyday life

## ALGEBRA II

This one-year course in algebra continues and expands upon the concepts and procedures learned in Algebra I. It has the primary goal to develop competence in using variables and functions to model numerical patterns and quantitative relations. Emphasis is on the study of polynomial, rational, exponential, and logarithmic functions, systems of equations and inequalities, matrix arithmetic, and sequences and series. Connections to other areas of mathematics and applications to other disciplines are integrated into the course. The use of technology, including graphing calculators and computer software, is an integral part of this course.

### PREPARATION FOR HIGH-STAKES EXAMINATIONS

It is expected students will:

- maintain skills learned in previous mathematics courses while preparing for the Nevada High School Proficiency Examination in Mathematics and college-entrance examinations

### REAL NUMBER SYSTEM

It is expected students will:

- ⊙ evaluate formulas and algebraic expressions using multiple strategies
- ⊙ apply properties of the real number system including exponents, logarithms, and radicals
- ⊙ solve problems using real and complex numbers
- ⊙ solve problems using matrix algebra
- ⊙ evaluate formulas and algebraic expressions, including rational, radical, exponential, and logarithmic expressions

### FUNCTIONS, RELATIONS, EQUATIONS, AND INEQUALITIES

It is expected students will:

- ⊙ solve problems integrating coordinate geometry and algebra
- ⊙ graph and solve equations and inequalities including linear, absolute value, and quadratic functions, using a variety of methods
- graph and solve equations and inequalities including polynomial, exponential, logarithmic, rational, and radical functions, using a variety of methods
- identify and graph conic sections
- ⊙ solve systems of linear and non-linear equations and inequalities, with and without technology, including applications to linear programming
- ⊙ perform operations on polynomials, including factoring
- solve problems using the algebra of functions, including composition and inverse
- ⊙ solve problems involving the domain and range of functions and relations
- ⊙ solve problems using finite and infinite sequences and series

### DATA ANALYSIS AND PROBABILITY

It is expected students will:

- ⊙ organize statistical data in tables, graphs, and matrices
- ⊙ apply permutations and combinations to mathematical and practical situations, including the Fundamental Counting Principle

## ***ALGEBRA II (Continued)***

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### **PROBLEM SOLVING**

It is expected students will:

- ⊙ generalize solutions and apply previous knowledge to new problem solving situations
- ⊙ determine an efficient strategy, verify, interpret, and evaluate the results with respect to the original problem
- ⊙ apply problem solving strategies until a solution is found or it is clear that no solution exists.
- ⊙ interpret and solve a variety of mathematical problems by paraphrasing
- ⊙ identify necessary and extraneous information
- ⊙ check the reasonableness of a solution
- ⊙ apply technology as a tool in problem solving situations
- ⊙ apply combinations of proven strategies and previous knowledge to solve non-routine problems

### **MATHEMATICAL COMMUNICATION**

It is expected students will:

- ⊙ use a variety of techniques to solve mathematical problems
- ⊙ evaluate written and oral presentations in mathematics
- ⊙ model and explain mathematical relationships using oral, written, graphic, and algebraic methods
- ⊙ communicate and evaluate mathematical thinking based on the use of definitions, properties, rules, and symbols in problem solving
- ⊙ use everyday language, both orally and in writing, communicate strategies and solutions to problems using appropriate mathematical language

### **MATHEMATICAL REASONING:**

It is expected students will:

- ⊙ recognize and apply deductive and inductive reasoning
- ⊙ review and refine the assumptions and steps used to derive conclusions in mathematical arguments
- ⊙ make and test conjectures about algebraic and geometric properties based on mathematical properties
- ⊙ justify the validity of an argument
- ⊙ construct a valid argument

### **MATHEMATICAL CONNECTIONS:**

It is expected students will:

- ⊙ use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- ⊙ explain the relationships between concepts and procedures
- ⊙ use the connections among mathematical topics to develop multiple approaches to problems
- ⊙ apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as rhythm in music and motion in science
- ⊙ identify, explain, and apply mathematics in everyday life

# PRINCIPLES OF SCIENCE

Principles of Science presents integrated concepts from earth science, biology, and physical science. This standards-based course is designed to provide a foundation for further study in science as students explore unifying scientific principles and concepts.

## NATURE OF SCIENCE

- safely engage in structured and original exploration of scientific questions
- ⊙ develop and defend scientific explanations using evidence and/or data
- ⊙ analyze trade-offs in the relationships between science, technology, and society
- explore the work of scientists, career opportunities, and educational requirements
- ⊙ explain how scientific knowledge is developed and used
- ⊙ develop a working definition of the concept of sustainability

## SYSTEMS OF ENERGY

- ⊙ classify energy sources and describe how energy is transformed within a system
- ⊙ relate sustainability to energy storage and energy transfer
- ⊙ describe thermal energy and how it is transferred
- ⊙ describe how energy relates to living things

## SYSTEMS OF MATTER

- describe the chemical nature of food
- ⊙ use the properties of elements for classification
- ⊙ explain the use of the periodic table
- ⊙ describe the role of bonding in molecules
- investigate how properties of a material are the result of its atomic structure and components

## TECHNOLOGICAL SYSTEMS

- describe current technologies related to exploration of space, exploration of ecosystems, and exploration of microscopic phenomena
- ⊙ discuss trade-offs associated with the relationships among science, technology and society

## LIFE SYSTEMS

- ⊙ describe the needs of living things on Earth
- describe the characteristics of Earth that sustain life
- ⊙ use principles of genetics to describe reproduction

# BIOLOGY

Biology is the study of living systems with an emphasis on developing inquiry skills and problem-solving techniques. Instruction is designed to provide a foundation for making wise career and personal choices in areas related to the biological sciences. The interrelated nature of science and technology will also be stressed.

## INTRODUCTION AND REVIEW

- demonstrate proper laboratory techniques, including the use of the microscope
- ⊙ organize data into charts, graphs, or tables
- ⊙ analyze data presented in graphical form
- explore the historical contributions of various scientists to our present understanding of biology
- ⊙ use scientific processes to solve problems

## ORGANIZATION OF LIFE ON EARTH

- explain the basis of biological classification
- use keys to classify organisms
- ⊙ analyze the characteristics of major groups of plants and animals

## ECOSYSTEMS AND THE BIOSPHERE

- outline the climatic factors which influence the distribution of living organisms
- ⊙ describe adaptations of organisms to their habitats
- ⊙ assess the impact of human activities on the biosphere
- ⊙ diagram natural cycles such as the water cycle, nitrogen cycle, and the carbon dioxide-oxygen cycle
- diagram the transfer of energy through food chains and/or food webs

## CHEMICAL ORGANIZATION OF LIFE

- ⊙ distinguish among atoms, elements, compounds, ions, and molecules
- distinguish among proteins, carbohydrates, lipids, and nucleic acids
- ⊙ analyze the role of enzymes in living organisms

## CELL ORGANELLES

- distinguish between plant and animal cells
- ⊙ describe the structure and function of the cell organelles
- ⊙ discuss the role of the cell as the basic unit of all organisms

## LIFE PROCESSES

- ⊙ identify processes that distinguish life from non-life
- compare active and passive transport
- distinguish between anaerobic and aerobic respiration

## ***BIOLOGY (Continued)***

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- compare photosynthesis and respiration
- ⊙ outline the steps of protein synthesis

### **REPRODUCTION**

- compare mitosis and meiosis
- compare sexual and asexual reproduction
- solve genetics problems
- ⊙ apply Mendel's laws of inheritance
- ⊙ explain the role of genetics in the development of species

# EARTH SCIENCE

Earth Science is an introductory course designed for the student to become familiar with the Earth, its environment, and its place in the universe. Science process skills such as measurement, data collection, and data analysis will be stressed throughout the course.

## INTRODUCTION AND REVIEW

- use safe laboratory processes
- measure length, mass, volume, and temperature in metric units
- use scientific processes to solve problems
- ⊙ organize and analyze data

## ASTRONOMY

- ⊙ describe our sun-centered solar system
- describe the Milky Way Galaxy and our Sun's location within it
- ⊙ investigate interactions among the Earth, the Sun and the Moon
- differentiate among the planets
- investigate different space programs

## EARTH HISTORY

- ⊙ construct a model of the geologic time scale
- ⊙ classify different kinds of fossils
- distinguish between molds and casts as types of fossil preservation

## STRUCTURAL FORCES

- relate how earthquake locations are determined
- ⊙ describe the theory of plate tectonics
- ⊙ distinguish between constructive and destructive forces that shape the Earth's surface

## EARTH CHEMISTRY

- ⊙ identify different types of chemical bonds
- identify common rock-forming minerals
- identify economically important rocks and minerals

## EARTH'S RESOURCES AND ENVIRONMENT

- ⊙ describe the Sun's role as an energy source on the Earth
- describe how fossil fuels are formed
- distinguish between exploration and exploitation
- ⊙ discuss how energy exploitation can change the environment

## WEATHERING AND SOIL

- ⊙ test for chemical weathering changes
- ⊙ compare main soil types

## ***EARTH SCIENCE (Continued)***

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- demonstrate that groundwater can alter surface features
- illustrate how glaciers affect the surface of the Earth
- assess conditions that affect flood runoff

### **METEOROLOGY**

- list the various areas of the atmosphere
- outline the water cycle
- assess weather patterns
- illustrate the major climate zones of the Earth
- ⊙ evaluate the factors that influence the climate of Las Vegas

### **OCEANOGRAPHY**

- describe the features of the ocean floor
- explain how global wind patterns cause surface currents
- investigate wave motion

# ENVIRONMENTAL SCIENCE

Environmental Science is an introductory course designed for the student to become familiar with the environment through research and experimentation. Science process skills such as measurement, data collection, and data analysis will be stressed throughout the course.

## PRINCIPLES OF ECOLOGY

- ⊙ distinguish between living and nonliving factors in the environment
- ⊙ outline the parts of an ecosystem
  - describe the major biomes of earth
- ⊙ give examples of natural selection
- ⊙ evaluate the factors which affect population dynamics

## SOILS

- ⊙ identify the physical, chemical, and biological factors which contribute to soil formation
  - assess the effects of various farming practices on soil erosion
  - list sources of soil pollutants

## WATER

- ⊙ illustrate the water cycle
- ⊙ outline the flow of water from Lake Mead into the Las Vegas water system and its return to Lake Mead
- ⊙ list the major sources of water pollution in Clark County
- ⊙ describe local water conservation programs

## LAND USE PLANNING

- identify the steps in the development of a land use plan
- ⊙ describe land use patterns in the Las Vegas Valley
- classify the variables involved in the urbanization process

## AIR

- describe the major components of air
- ⊙ explain how the uneven heating of the earth's surface influences weather patterns
- classify air pollutants according to their sources
- explain the operation of various air pollution control devices
- distinguish among the levels of air pollution alerts

## ENVIRONMENTAL CONTAMINATION

- examine the differences among municipal, industrial, agricultural, sewage, and yard wastes
- investigate the rate of decomposition of various solid wastes
- identify the regulatory agencies which are responsible for environmental regulations

## ***ENVIRONMENTAL SCIENCE (Continued)***

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### **ENERGY**

- ◎ identify what energy sources are needed to meet the needs of an ever-changing society
- ◎ distinguish between renewable and nonrenewable energy sources
- debate the environmental issues concerning the use of all energy sources

# CHEMISTRY

Chemistry is designed for the student to become familiar with chemistry and chemical processes through research and experimentation. Science process skills such as measurement, data collection, and data analysis will be stressed throughout the course. Career opportunities and relevant instruction will be an integral part of the course.

## REVIEW

- ⊙ use scientific processes for solving problems
- use metric units and measurements in the laboratory
- practice safe procedures in the laboratory
- ⊙ organize and analyze data in forming scientific explorations

## ELEMENTS, COMPOUNDS, AND MIXTURES

- ⊙ use chemical symbols and formulas
- review atomic structure
- ⊙ relate atomic structure to periodic properties
- ⊙ classify elements

## CHEMICAL BONDING

- ⊙ predict types of bond formation
- distinguish among empirical, molecular, structural, and Lewis formulas
- ⊙ describe ions

## NOMENCLATURE/CHEMICAL EQUATIONS/STOICHIOMETRY

- relate the symbols and names of common chemical elements and compounds
- use chemical equations correctly

## GASES

- relate the three assumptions of the kinetic molecular theory
- solve problems involving the interrelationships among volume, temperature, and pressure

## LIQUIDS AND SOLIDS

- ⊙ describe the properties of liquids and solids
- relate the kinetic molecular theory to the description of solids and liquids
- ⊙ distinguish among evaporation, condensation, and sublimation

## SOLUTIONS

- ⊙ differentiate among colloids, solutions, and suspensions
- discuss the effects of temperature and pressure on solubility
- predict precipitates

## ***CHEMISTRY (Continued)***

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### **ACIDS, BASES, AND SALTS**

- distinguish among acids, bases, and salts
- recognize common acids and bases
- perform a neutralization reaction

### **THERMOCHEMISTRY/KINETICS**

- ⊙ distinguish between exothermic and endothermic reactions
- define kinetics
- ⊙ determine the rate (fast or slow) for a simple chemical reaction

### **ORGANIC CHEMISTRY**

- distinguish between organic and inorganic chemistry
- identify basic functional groups from their formulas
- discuss the process of polymerization of hydrocarbons

### **NUCLEAR CHEMISTRY**

- differentiate among the basic radioactive emissions
- distinguish between fission and fusion
- ⊙ explore the uses and disposal of nuclear materials

# PHYSICS

Physics courses are designed for students to become familiar with the study of physics through lab work and problem-solving. Science process skills, such as measurement, data collection, collaboration, and data analysis will be stressed throughout the courses. All physics courses have an algebra pre-requisite.

## REVIEW

- ⊙ use scientific processes for solving problems
  - practice safe procedures in the laboratory
  - describe the contributions of physicists
- ⊙ organize and analyze data for use in making scientific explanations

## MOTION AND FORCES

- ⊙ use kinematics to describe and predict motion
- ⊙ explore the dynamics of moving objects

## ENERGY

- ⊙ describe and quantify energy changes
  - apply kinetic molecular theory of heat to thermodynamics
- ⊙ describe waves and wave properties
- ⊙ describe sound and its properties
- ⊙ describe light and its properties
- ⊙ explain electrical and/or magnetic fields

## MATTER

- ⊙ describe the relationship between matter and energy
- ⊙ describe atomic structure

# WORLD HISTORY TENTH GRADE

This one-year survey course will examine world history through the disciplines which comprise the humanities: the arts, philosophy, literature, history, political institutions, and religion. It explores the great ideas and actions of humankind which have shaped life. The emphasis is on European, Asian, African, Latin American, and Middle Eastern civilizations. This course fulfills the world history and the arts/humanities credits required for graduation.

## WORLD HISTORY SKILLS

- Chronology
- History Skills

## WORLD HISTORY CONTENT

- Pre-agricultural Civilizations
- Early Civilizations
- Classical Civilizations
- Civilizations of the Americas
- Regional Civilizations
- Civilizations of the Americas
- Regional Civilizations
- Renaissance, Reformation, and Exploration
- The Era of Revolutions
- Expansion, Imperialism, and World Wars
- The Cold War
- Global, Economic, and Political Changes
- Approaching and Entering the New Millennium

# UNITED STATES HISTORY ELEVENTH GRADE

This is a one-year survey course from the exploration period to the present. Emphasis will be placed on significant historical events in the history of the United States and their consequences. This course will fulfill the one United States History credit required for graduation.

## UNITED STATES HISTORY SKILLS

- Chronology
- History Skills

## UNITED STATES HISTORY CONTENT

- Exploration, Interaction, and Exchange
- Colonization
- Revolutionary Period
- Confederation and Constitutional Periods
- The Emerging Nation
- Nationalism and Sectionalism
- The Civil War
- Reconstruction
- Migration and Industrialization Change Society
- The Progressive Era
- Imperialism and World War I
- Between the Wars
- World War II
- Cold War Conflicts
- Post-War Domestic America (1945-1960)
- The Turbulent Years (1960-1975)
- Global America (1975-Present)

# U.S. GOVERNMENT TWELFTH GRADE

This one-year course is a study of federal, state, local, and tribal governments. Topics covered include national, state, local, and tribal government structures, functions, and responsibilities, as well as citizens' rights and responsibilities. This course will fulfill the one United States Government credit required for graduation.

## **UNITED STATES GOVERNMENT SKILLS**

- Chronology
- Government Skills

## **UNITED STATES GOVERNMENT CONTENT**

- Importance of Government in Society
- Philosophical and Historical Foundations
- Drafting and Writing the Constitution
- Ratifying the Constitution
- Structure of the Constitution
- Bill of Rights
- Election Process
- Media and Public Opinion
- Citizenship
- Political Parties
- Interest Groups
- Legislative Branch
- Executive Branch
- Judicial Branch
- Additional Amendments Related to Individual Rights
- Remaining Amendments
- Economic and Political Systems
- International Relations
- State Governments
- Local Governments
- Tribal Governments



**Curriculum and Professional Development Division**  
Las Vegas, Nevada

